HOSPITAL ABSTRACTS

A MONTHLY SURVEY OF WORLD LITERATURE

PREPARED BY THE DEPARTMENT OF HEALTH

AND SOCIAL SECURITY

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HOSPITAL ABSTRACTS

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HOSPITALS IN GREAT BRITAIN

761. BUXTON, M. J. and KLEIN, R. E. **Distribution of hospital provision: policy themes and resource variations.** *British Medical Journal*, London, 1975, Feb. 8, vol. i, pp. 345-349.

There has been much discussion in the past about the inequitable distribution of National Health Service resources between the different regions. This paper examines the distribution of hospital resources in terms of current revenue and beds in different specialties in eight regions (49 area health authorities) in England. The results are presented in two tables. Variations between area health authorities are far more important than those between regions, and indeed they are so large (even in the acute specialties) that it is doubtful whether some areas can be considered to be offering a comprehensive service. In the light of these findings the paper explores policy problems involved in trying to secure a more equitable distribution of National Health Service resources at a time of financial stringency.

HOSPITALS IN OTHER COUNTRIES

762. STEVENS, R. and STEVENS, R. **Welfare medicine in America: a case study of Medicaid.** New York, Free Press, 1974, xxiv, 386pp. £7.50.

Medicaid was designed to bring substantial federal subsidies to states to provide comprehensive health services to needy persons, 'needy' being defined by each state. While phenomenally successful in some ways, it has come under increasing criticism from various quarters. This case study of Medicaid examines its antecedents, the initial legislation and implementation at state and local level and analyses the series of modifications that have marked the programme in the last few years.

763. ROSCHTSCHIN, A. Krankenhausplanung in der UdSSR. **[Hospital planning in the USSR.]** *Krankenhausarzt*, Karlsruhe, 1974, Nov., vol. 47, no. 11, pp. 644-651; Dec., vol. 47, no. 12, pp. 673-676, 678-680, 682-683; 1975, Jan., vol. 48, no. 1, pp. 11-12, 14-21; Feb., vol. 48, no. 2, pp. 59-60, 62-64, 66-68, 70.

A brief account is given of the development of hospitals in Russia since the 18th century. In 1970 there were 28.3 doctors and 87 doctors' assistants per 10,000 inhabitants. In 1975 the number of hospital beds is said to be three million—11.7 per 1,000 inhabitants. Since 1974 all hospitals and polyclinics have been incorporated functionally and administratively into a uniform system. Hospitals are of four main types: general hospitals with 300 to 400 beds and the four principal specialties; general hospitals with 400 to 600 beds and eight specialties; general hospitals with over 1,000 beds and at least 10 to 12 specialties, usually teaching hospitals; and specialist hospitals with over 300 beds. The paper includes many photographs and plans of Russian hospitals.

PLANNING, DESIGN AND CONSTRUCTION

See also Abstract No. 763

764. BOSTIN, M. J. and GINSBERG, D. L. **Organizing the planning team.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, pp. 95-96, 98-99.

The cost of a hospital project depends on three elements: the programme, the design, and the time needed for planning and construction. It is important to have a clear-cut understanding of the entire process and of the respective roles of the hospital planning consultant and the architect. To this end the paper gives a check list of 46 steps which have to be taken, showing which are the primary responsibility of the architect or consultant, and which of the two is expected to advise, provide documentation, or assess the position on certain aspects. The architect and consultant complement each other by conducting interviews, taking part in meetings and discussions, and submitting comments and suggestions.

765. GREEN, H.E. **Developing a master plan.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, pp. 75-76, 80.

Decisions on the updating and expansion of a hospital are often taken on a short-term basis. But unless a detailed assessment of long-term needs, and the best means of achieving them, is undertaken there will not be a satisfactory solution. Long-term planning needs three stages: role determination; choice of alternatives for achieving this role; and implementation. The basic principles of each stage are discussed. Some of the mistakes which are made, and which can lead to increased costs, are listed as follows: undue weight given to capital costs; failure to evaluate possible alternatives; failure to allow for medical advances; inadequate co-operation with other health facilities; failure to keep the plan under continuing review; and inadequate financial planning.

766. LOGAN, R. W. and CLAYTOR, N. V. **Cost saving through areawide planning.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, pp. 65-67, 70-71.

The Hospital Survey Committee (HSC), a non-profit-making advisory planning agency, has carried out a study in the Philadelphia/South Jersey area with the following objectives: to develop space-need standards; to investigate the effect of modern design, management and construction techniques on cost; and to determine suitable financing methods. The HSC has put forward 10 guidelines, reproduced in full in the paper, which it is estimated would save 15 per cent of the $450 million of hospital construction expected during the 1970s. A comparison of the cost per square foot of four hospital projects constructed by traditional techniques with five using the 'turn key' system proposed by HSC (under which all design and construction responsibility is reposed in a single agency) shows strikingly lower costs for the latter—the average cost per square foot was 39 per cent lower (all nine projects were constructed between 1970 and 1972). The guidelines include recommended space allocations per bed for individual services.

767. BALLARD, A. K. **Growth and effectiveness of regulated planning.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, pp. 61-64.

Past attempts to co-ordinate the planning of health services in the United States have

not been very successful. This paper outlines the proposals for planning legislation which are now being put forward. There would be a national council charged with the formulation of national health policies, goals and guidelines and the evaluation of research. A state council would (among other things) review and approve state and area-wide plans and budgets, approve grant allocations, relate health programmes with other state programmes, advise the state agency and provide material for federal policies. A state agency would administer grants and information, maintain a balance throughout the state, provide technical help and assist with planning problems as well as providing other services. An area-wide council or agency would be concerned with its own planning and co-ordinating problems and keep state and federal agencies informed on area needs.

768. EPPERSON, G. W. and JUEDEMAN, R. F. **Accounting to the community.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, pp. 83-84, 87-88, 90-91.

In 1972, when it became necessary to improve and expand the services provided by the Medical Center Hospital, Odessa, Tex., it was agreed that the local chamber of commerce should set up a steering committee to direct the project. A meeting was called and a building committee, selected from a citizens' advisory committee of persons interested in the hospital and hospital representatives, appointed a firm of consultants to draw up a plan. During the planning process the community was deeply involved: a group of 75 citizens, selected on a broad basis, took part in a two-day meeting and a weekly bulletin published by the hospital was distributed throughout the community. The result was a project which is transforming the hospital into a regional referral centre concentrating on acute care and has avoided wasteful duplication.

769. FRISCHKNECHT, W. Ein Konzept zur Gesundheits- und Spitalplanung in der Schweiz. **[A concept for health and hospital planning in Switzerland.]** *Veska*, Aarau, 1975, Feb., vol. 39, no. 2, pp. 90-91.

This paper puts forward a scheme for the planning of health and hospital services in Switzerland. Planning should be at three levels: long-term (10 to 20 years); medium-term (five to 10 years) and short-term (up to five years). Long-term planning should deal with the country as a whole and the planning organs should be the health directors' conference, the Swiss Hospital Institute, the Swiss Red Cross and other national bodies. Medium-term planning should be supra-cantonal (seven regions) and the planning organs should be regional planning committees covering several cantons. Short-term planning should be at cantonal level and directed by cantonal planning centres.

BUILDING: TENDERING, ETC.

770. DICARA, J. A. **Construction management: an example.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, pp. 143-146.

The new system of awarding contracts for hospital projects in New Jersey, employing construction managers, is described. The manager, appointed by the hospital for a particular project, assists at the design stage and also provides the sponsor with a guaranteed maximum cost when design drawings with outline specifications are half completed. Construction starts before final drawings are completed. The guaranteed

maximum cost has three components: the total cost of subcontracts or the construction cost; the estimate for general conditions as specified; and the construction manager's fee. If the final cost is less than the guaranteed maximum the difference is returned as a saving to the owner; if it is more the construction manager meets the difference. For $89 million worth of projects there has been a saving of about $6 million.

771. RICHIE, G. R. and SKAGGS, R. L. **Choosing a construction process.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, pp. 135-136, 138-140.

The key to successful management of construction costs is continuous communication among the members of the design and construction team (hospital, architect and contractor). By overlapping they can provide better solutions and reduce the time needed. The traditional 'sequential' design and construction procedure, with design completed before the contract is negotiated, has many disadvantages. The 'staged' procedure allows construction to start before final drawings are completed thus saving construction time. The 'accelerated' or 'fast track' procedure is similar to the 'staged' but in addition divides the stages of construction into packages for separate contracts. The three procedures are described and their advantages and disadvantages set out. The actual procedure to be adopted must be tailored to suit the need of the individual hospital.

HOSPITAL DESIGN

See also Abstract No. 784

772. FALICK, J. **Designing cheap buildings is expensive.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, pp. 125-127, 129-130.

A badly designed and cheap building will deteriorate rapidly, cost more to run, and will have a bad effect on patient care. True cost containment in design (as opposed to design containment by cost) depends on how the architect involves hospital staff and others in the design process to ensure operational efficiency and on how he applies modern techniques to analyse and control constructional processes. This paper discusses some of these modern techniques: they include computer analysis, industrialized building systems, cost-benefit analysis, energy considerations and life-cycle costing.

773. MOORE, J. S. and SPENCER, W. J. **Planning space around systems.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, pp. 115-116, 118.

Planning for optimum use, and thus avoiding wasted space, can be achieved by basing requirements on clearly defined work loads. A functional and space programme can be developed in three ways. The first depends on data laboriously collected by hospital staff: while this is effective in the short-term it is not economical in terms of the quality of the space programme and has other problems. The second method employs a firm of consultants who conduct interviews with hospital staff: this is effective, but expensive, and takes time. The third method is a compromise by which a questionnaire drawn up by the consultant advisers is completed by hospital staff and assessed by the administration. This saves both time and money. Examples of how space requirements for operating suites and X-ray departments are determined in relation to the expected work load are included in the paper.

DESIGN OF INDIVIDUAL GENERAL HOSPITALS

774. **Addition turns hospital around to improve service.** *Hospitals*, Chicago, 1975, Feb. 16, vol. 49, no. 4, pp. 37, 40.

The new eight-storey addition to Samaritan Hospital, Troy, N.Y., was designed to become the facility housing the major functions of the hospital; the existing building was renovated to become an extension and support facility. The ground and first floors house administrative, diagnostic, treatment and support services, the second floor has surgical, maternity and intensive care facilities, the third floor is a mental health clinic and the fourth has facilities for children. Each of the top three floors has 42 beds for general medicine or surgery in 16 double, eight single and two isolation rooms. Each floor is L-shaped, with the nurses' station at the corner and near the lifts. A plan of a medical-surgical floor is included.

775. POLLACK, R. S. **Shell construction for future expansion.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, p. 149.

When Lauderdale Lakes (Fla.) General Hospital was being planned it was calculated that 150 beds would be needed when the hospital opened in 1973 but that a further 150 beds would be necessary a year later. The two upper floors of the building were therefore merely 'shelled' (upper floor slabs and exterior walls, including windows, were completed with the interior unfinished). These two floors of the five-floor building represented only eight per cent of total construction costs and the 'shelling' saved about 18 per cent of the cost of providing the extra space. In the meantime the 'shelled' floors provided excellent storage space. As the exterior was completed the building had a finished appearance.

776. Willem Alexanderziekenhuis te 's-Hertogenbosch. **[Willem Alexander Hospital, 's-Hertogenbosch.]** *Bouw*, Rotterdam, 1974, July 6/13, nos. 27/28, pp. 671-673.

The 300-bed Willem Alexander Hospital, 's-Hertogenbosch (architects: Wiegerinck-van Balen-Meurkens-Dorigo, Arnhem) completed in 1974, has a two-storey podium housing all services; above this rises the multi-storey slab block housing the wards. Wards are on a double corridor plan and have about 40 beds divided into three units. There are two separate traffic cores—one for domestic transport and the other for nursing services. There are three staff residence blocks housing a total of 84 staff members. The paper is illustrated with a site plan, an elevation, sketch plans of typical floors, and six photographs.

DESIGN OF SPECIAL DEPARTMENTS

See also Abstract No. 844 (Laundries)

777. BUGMANN, H. Pflegeschulen Aarau—Neu- und Umbau. **[New building and reconstruction of the nursing school, Aarau.]** *Veska*, Aarau, 1975, Feb., vol. 39, no. 2, pp. 72-77.

The new nurses' training school at Aarau consists of a 13-storey residential block and a two-storey school building. On each of 12 floors of the residence there are 14 single

rooms plus washroom and lounge with small kitchen: the top floor has two flats for senior nurses and a day room. On each floor of the school building there are four classrooms: there is also a gymnasium with ancillary rooms and a library. The sub-ground floor houses a swimming pool. The existing 1933 building is being modernized. The paper is illustrated with floor plans and five photographs.

778. MAISONNET, M. and others. Le Centre de grands brûlés de l'Institut de Médecine, de Traumatologie et de Réadaptation à Loverval. **[Burns centre, Institute of Medicine, Traumatology and Rehabilitation, Loverval.]** *Hôpital Belge*, Bruxelles, 1974, Nov./Dec., vol. 17, no. 112, pp. 11-21.

The burns centre at Loverval is the first to be built in Belgium. It has four double and two single rooms arranged around a central nurses' station. Each patient room is entered through a utility room. Other accommodation includes reception area, operating theatre, occupational therapy room, bathroom and staff facilities. The whole centre is air-conditioned with a room temperature of 32°C and the use of positive pressure to reduce infection. Features of the centre include: separate entrance for patients; separate staircases for visitors leading to cubicles adjoining each patient room; and built-in waste disposal chutes in each patient room. A plan and 12 photographs of the centre are included.

DESIGN OF SPECIAL HOSPITALS OR UNITS

779. HARDING, H. **Middlesbrough General Hospital neurology unit.** *Nursing Mirror*, London, 1975, Feb. 27, vol. 140, no. 9, pp. 66-67.

The new neurology unit at Middlesbrough General Hospital has 22 beds and a comprehensive investigation area. The ward area is on the ground floor and has six single and four four-bed rooms in two wings with a central nurses' station: the total nursing staff is 27. Most patients are seen on an out-patient basis (the out-patient clinic is on the upper floor) but those needing a range of tests, or medical or post-operative care, are admitted as in-patients. There are five photographs of the unit.

780. Epilepsiecentrum 'De Cruquiushoeve' te Vijfhuizen, Haarlemmermeer. **[The epilepsy centre 'De Cruquiushoeve', Vijfhuizen, Haarlemmermeer.]** *Technische Gids voor Ziekenhuis en Instelling*, Amsterdam, 1975, March 4, vol. 44, no. 1070, pp. 156-159.

The centre for epileptics at Heemstede can accommodate 536 patients (265 males, 130 females and 141 young people under 18). The centre is in the form of a village with the village green surrounded by bungalow-type buildings. The pavilions for the more independent patients each take 48 patients in four separate units of 12, each with its own living and dining-room, and bedrooms with two, three or four beds. The medical centre, in addition to dental rooms, physiotherapy, and laboratory, has wards for 80 patients requiring special care. Near the village green are the chapel and the leisure centre. There is full provision for occupational therapy and industrial training. The school can accommodate 130 children who receive more or less individual instruction: there are play rooms for toddlers.

781. SJUKVÅRDENS OCH SOCIALVÅRDENS PLANERINGS- OCH RATIONALISERINGSINSTITUT. Förlossningsavdelningar—funktioner, lokalprogram, planlösningar. **[Delivery rooms—function, spatial programme, layout.]** (Spri råd 5.19) Stockholm, Spri, 1974, 25pp.

This advice note recommends a combined functional and spatial programme for delivery rooms; it also states the main principles affecting their layout. The recommendations are based on a comparative study of 14 delivery rooms, which are described, with plans, in an appendix. Two sketch plans illustrate the recommendations. [This abstract has been prepared from an English summary of the publication.]

782. **The Dukeries Centre, King's Mill Hospital, Sutton-in-Ashfield.** *Nursing Mirror*, London, 1975, Feb. 20, vol. 140, no. 8, pp. 40-41.

The Dukeries Centre was opened in January 1975, and will provide up-to-date maternity care for the Mansfield and Newark area. The out-patient department, pathology laboratory, pharmacy and parentcraft room provide patients with modern maternity care, and a voluntary service organization provides a child-minding service for the children of mothers attending clinics. Medical facilities at the centre include a special care nursery for 28 ill and premature babies, with an adjoining unit for mothers remaining with their babies. The consultant delivery unit contains an admission suite, eight 'first-stage' labour rooms and seven delivery rooms, and a twin theatre suite for caesarean and other operations. Two multi-storey blocks contain maternity wards, divided into four-bed and single rooms, a labour suite and maternity ward for the use of general practitioners, and will soon have a children's ward. A basement is used for the distribution of hospital supplies. Efforts have been made to make the hospital as pleasant as possible, by the use of attractive colour schemes and furnishings, and the provision of varied menus by the catering staff.

783. Erweiterungsbau der kant. psychiatrischen Klinik Liestal. **[Extension of Liestal Cantonal Psychiatric Hospital.]** *Hospitalis*, Zürich, 1975, March, vol. 45, no. 3, pp. 109-113.

The first stage of the extensions to Liestal Psychiatric Hospital, completed in October 1974, consists of a four-storey ward block with two subground floors (architects: Burchhardt & Partner). The ground floor houses administration, doctors' and consulting rooms, kiosks, pharmacy and staff canteen. The four upper floors each have 30 beds, in single and double rooms, with day-rooms and activity rooms. Details are given of the heating, air-conditioning, telephone and fire alarm installations. The paper is illustrated with a site plan and six photographs.

CORRIDORS AND STAIRWAYS

784. HARDY, O. B. **Simplified traffic flows.** *Southern Hospitals*, Greenville, S.C. 1975, Jan., vol. 43, no. 1, pp. 8-9.

Many operational processes in hospitals cut across traditional departmental lines and traffic flow must take account of this. Correct planning of internal circulation is affected by outside entrances, external circulation and parking. The mission of persons

entering the building should be anticipated and routes of travel inside made as short and direct as possible. Supply flows must be sorted, beginning with the receipt of new items and ending with the disposal of refuse. The seven main categories of traffic entering a hospital and circulating therein are: emergency patients; out-patients; in-patients; staff and paramedical students; doctors and medical students; visitors; and supply and equipment items. By means of detailed analysis it can be concluded that: (i) staff can be sorted externally and channelled from their own parking area to their special entrance and thence to cloakrooms and work areas; (ii) visitors should have a designated parking area and should have direct access to wards via a public hall; (iii) there must be a special emergency vehicle entrance with the emergency suite adjoining; (iv) doctors and medical students should go from their own parking area and their entrance should have direct routes to diagnostic and treatment areas and wards; (v) all supply flows can stem from a single receiving point; and (vi) optionally in-patient and out-patient traffic can be separated from visitors. The hospital must be regarded as a single system functioning as a whole with traffic flows being planned so as to gain total operational objectives.

GUIDING AND SIGNPOSTING

785. **Bright, bold sign program directs people through hospital.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, p. 25.

The Massachusetts Eye and Ear Infirmary has recently called in a firm of graphic consultants to redesign its signs and direction guides. This has been done with the interests of patients with defective eyesight particularly in mind. Signs are in bright, contrasting colours: general signs are in blue with a brown underline; doors leading to staircases are green. Lift doors have a different colour for each floor and have the word 'elevator' in large white letters, printed vertically, covering the whole height of the door. Staircase walls have the floor number indicated by a huge floor to ceiling vinyl number sign. Exterior signs have been placed in surrounding streets, underground stations and car parks.

ENGINEERING SERVICES

See Abstract Nos. 815, 816

ELECTRICAL INSTALLATIONS AND EQUIPMENT

786. OLSON, R. **Continuous power to the OR and other critical care areas.** *Dimensions in Health Service*, Toronto, 1975, Feb., vol. 52, no. 2, pp. 29-30.

At Holy Cross Hospital, Calgary, where open heart surgery and other cardiovascular operations are carried out on patients from the southern half of Alberta, it is essential that there should always be an uninterrupted supply of electricity for both lighting and power. Although the hospital has a natural gas or oil powered emergency generator it was decided, in case of failure of the latter, to install an inverter power supply. The inverter, which is self-generating, changes the direct current energy stored in a lead acid battery so that it can be used to supply circuits requiring alternating current voltage. The system is described and illustrated by a schematic drawing.

TRANSPORT IN GENERAL

787. **Site characteristics dictate materials handling system design.** *Hospitals*, Chicago, 1975, Feb. 16, vol. 49, no. 4, pp. 81-82, 84.

The 308-bed Greenville (S.C.) Memorial Hospital is part of a 128-acre comprehensive health care complex designed to meet the present and future needs of the community. At present it includes the hospital, a mental health centre, a rehabilitation institute, a warehouse and a boiler plant. The topographical characteristics of the site and the planning criteria dictated a horizontal building scheme. It has a broad, deep basement area which houses the supply and mechanical services and serves as a plinth underlying the horizontal group of building elements. This provides the necessary interstitial space above the service areas for the lateral distribution of mechanical services, while leaving enough space for a mezzanine to serve as the lateral passageway for the horizontal distribution of materials and supplies. The transport system uses self-propelled, battery-powered transporters with electronic guidance systems that follow wires embedded in the floors. The transporters move automatically to one of the four vertical lifts. Supplementing this automated system of bulk material supply is a pneumatic transport system for small items.

HEATING

788. HOLLER, K.F. Wärmeversorgung und -verteilung im Rahmen der haustechnischen Gebäudeausrüstung von modernen Krankenhäusern. **[Heat supply and distribution as part of the technical equipment of the modern hospital.]** *Krankenhaus Umschau*, Kulmbach, 1975, March, vol. 44, no. 3, pp. 145-150.

Consideration must be given at the earliest planning stage to the heat supply since faulty planning from this aspect can lead to excessive capital and revenue costs. Boilers are conventionally housed in a subground floor or a separate building but recently one or two new hospitals have sited them on the top floor. The most suitable primary form of energy is natural gas or, where this is not obtainable, liquid butane or propane. Alternative emergency energy supply can come from light oil or electricity. The type of boiler to be used must be considered from the point of view of ease of change to alternative fuel and noise and vibration insulation. There should be no heated surfaces in such areas as the operating theatre and heat distributors in patients' rooms must be of a type which can be easily cleaned and will not dry out the air.

BOILERS AND BOILER HOUSES

789. BURTON, J. E. **A boilerhouse alarm system.** *Hospital Engineering*, Stevenage, 1975, March, vol. 29, pp. 22-23.

The boilerhouse alarm system at the Royal Albert Edward Infirmary, Wigan, is in two units: one in the boiler house and the other in a constantly manned position by the telephone switchboard. The boilerhouse unit has two time clocks and two variable timers. At night and week-ends a bell in the boilerhouse is rung at a certain frequency:

a reset button cancels the bell. If the bell is not cancelled within a set period a warning signal is transmitted to the second unit which raises the alarm for the switchboard operator to take action. Details are given of the operation and construction of the installation.

790. JENNY, A. La centrale thermique de l'hôpital psychiatrique de Rouffach (Haut-Rhin). **[Central boiler house, Rouffach Psychiatric Hospital.]** *Techniques Hospitalières*, Paris, 1974, Dec., vol. 31, no. 351, pp. 78-86.

This paper describes in great detail the new boiler house and heating and hot water installations at Rouffach Psychiatric Hospital. It covers: storage, preparation and distribution of fuel oil; steam production; steam distribution; hot water production; hot water distribution through 35 sub-stations; the 12 sub-stations for production of domestic hot water; the air-conditioning sub-station; electric power sources; emergency power supply; and fire precautions. Five photographs are included.

VENTILATION AND AIR-CONDITIONING

791. REXROTH, G. Klima- und Lüftungsanlagen in Krankenanstalten. **[Air-conditioning and ventilating equipment in the hospital.]** *Krankenhaus Umschau*, Kulmbach, 1975, March, vol. 44, no. 3, pp. 141-144.

This paper provides a general survey of the air-conditioning and ventilation installations which are necessary in a hospital. The various West German standards and regulations governing such systems are listed and the requirements for special areas (such as ear, nose and throat departments and operating suites) are outlined. Co-operation with bacteriologists to reduce the risk of infection being transmitted by air-conditioning equipment is essential.

792. NEUGART, H. von. Luftverhältnisse in einem Operationsaal mit vertikaler Kolbenströmung im Operationsfeld. **[Air conditions in an operating theatre with vertical laminar flow in the operating field.]** *Heizung-Lüftung-Haustechnik*, Düsseldorf, 1974, Nov., vol. 25, no. 11, pp. 389-392.

Tests have been carried out in an aseptic operating theatre, using vertical laminar flow air-conditioning in the operating field and with moveable curtains instead of side walls. The results show that air purity under this system is five times better than with conventional air-conditioning. The operating lamp was shown to have a disturbing effect and this factor will have to be investigated further.

MAINTENANCE OF BUILDINGS AND EQUIPMENT

793. DESROCHES, H. B. **Computer monitoring of preventive maintenance.** *Hospitals*, Chicago, 1975, Feb. 16, vol. 49, no. 4, pp. 86, 88, 90, 92.

This paper describes the computerized scheduling and information system developed for the preventive maintenance programme at Albany (N.Y.) Medical Center Hospital. A computerized system was essential to provide economically the data required to determine the cost effectiveness of the system. The computer generates work orders

and the regular and request-type reports. Among the regular reports are edit and update control reports, supervisors' work sheets, and manpower utilization study. Request-type reports include maintenance cost, 12-month projected schedule and a printout of the master file. The benefits of the system, including cost savings, are discussed. The system could be shared by up to 99 other hospitals. Examples of the work order, manpower utilization report and cost report are reproduced.

SANITARY EQUIPMENT AND FITTINGS

794. FEURICH, H. Sanitärausstattung des Krankenhauses. **[Sanitary installations in the hospital.]** *Krankenhaus Umschau*, Kulmbach, 1975, March, vol. 44, no. 3, pp. 137-140.

This guide to sanitary installations for hospitals is in two parts. The first deals with fittings for the ward and the second with fittings for treatment areas. Ward fittings described include wash-basins (washing should always be done in running water), toilets, baths, sluice room equipment, equipment for examination rooms, and equipment for the nurses' station. Treatment areas covered include the operating suites (central or departmental), gynaecology and maternity departments, urology treatment rooms, the central sterile supply department, and the physiotherapy department.

795. TYLMANN, J. **Cooling water treatment plant for the Cantonal hospital, Basle.** *Sulzer Technical Review*, London, 1975, vol. 56, no. 3, pp. 165-168.

This paper describes a plant which has been built at the Cantonal Hospital, Basel, to treat water from the Rhine. The plant supplies cooling water of suitable purity for the requirements of refrigerating machinery, emergency diesel generating sets and heat exchangers of the air-conditioning installations, with a flow rate varying steplessly between 50 and 1100 cu. m./h. The paper describes the Rhine water intake, coarse pollutant separation, raw water pumping station, filtration plant, flocculation and flushing. Plans and photographs of the plant are included.

EQUIPMENT, FITTINGS, FURNITURE

INTERIOR DECORATION

796. NILSSON, G. Målning—städning. **[Painting—cleaning.]** *Sjukhuset*, Göteborg, 1975, vol. 52, no. 2, pp. 67-71.

Selection of the correct paint for a job must be based on knowledge of the properties of the paint, the conditions of application, the way in which it is to be applied, and the materials, state, function and structure of the surface to be painted. Paints consist of binder, pigment, fill, solvent and various additives. Lime and emulsion paints darken when wet. Latex paints fade and come off when rubbed with a wet cloth. Oil paints fade under the effects of weak soda solution. Alkide paints tolerate soda for short periods but are attacked by thinners. Two-component paints tolerate light wipe-over with thinner. Jute and fibreglass are frequently used to cover walls and ceilings in corridors,

stairways, etc., and are painted with latex. Cleaning is complicated by the structure of the weave. Some wallpapers consist of coloured woven jute, straw, linen or artificial fibres: these are normally not washable. Smooth vinyl on a base of paper, cotton, fibreglass or expanded PVC, and attached with special glue, produces a surface highly tolerant of cleaning. Modern wallpapers are usually covered with a thin layer of plastic, which resists water and facilitates cleaning. Rooms with high standards of hygiene should be painted in a light colour with a paint which is easily kept clean.

FURNITURE AND FITTINGS IN GENERAL

797. SJUKVÅRDENS OCH SOCIALVÅRDENS PLANERINGS- OCH RATIONALISERINGSINSTITUT. Inredning i sjukvårdsbyggnader. Del 1: standardisering av skåp, hyllor och bänkar i vårdavdelningar, mottagningar m m. **[Furniture and fittings for hospitals. Part 1. Standardization in wards, out-patient departments, etc.]** (Spri råd 5.21) Stockholm, Spri, 1974, 31pp.

This advice note presents an account of the first stage of a study to provide information and advice on the standardization of hospital furniture. It covers fixed items, wardrobes, shelves, work tops for wards (short- and long-stay), operating theatres, X-ray departments and physiotherapy departments. Plans and tables are included. [This abstract has been prepared from an English summary of the publication.]

BEDS, COTS, ETC.

798. WESTERGAARD, R. H. Sengesentraler. **[Bed centres.]** *Sykehuset*, Oslo, 1975, vol. 38, no. 2, pp. 116-130.

In a bed centre handling 80 or more beds a day it pays to install mechanical bed-washing equipment, even though hygienic and ventilation standards have to be very high and the use of machines necessitates the purchase of more robust and more expensive beds. The functions of the bed centre are: (i) buffer store for beds; (ii) inspection, maintenance, washing and disinfection of beds; (iii) disinfection of mattresses, duvets and pillows; (iv) bed-making; and (v) storage of auxiliary bed equipment. Infectious patients' beds are handled in an isolation room. Electrically-operated beds are unsuitable for automatic cleaning procedures. To be automatically cleanable a bed must: (i) have a suitable surface finish; (ii) drip dry quickly; (iii) resist corrosion; (iv) have wash-resistant wheels; and (v) be solidly built. The bedside table should be attached for washing with the bed. The only realistic alternative to the bed centre is having separate units for each floor or ward. A plan of the bed centre at Aker Hospital is included.

LIFTING DEVICES, HOISTS

799. SALE, J. and WILSHERE, R. **Hoists.** *Nursing Mirror*, London, 1975, Feb. 20, vol. 140, no. 8, pp. 45-49.

The use of a hoist can be of great value in helping disabled patients to transfer from the bed to a chair, bath and lavatory, and will often provide essential help for those

caring for the patient. To ensure that the hoist is efficiently used so that maximum benefit from it is obtained, careful consideration must be given to selecting the right type of hoist for the patient, and the appropriate lifting technique. There are many types of hoist, which may be portable, requiring operation by an attendant, or fixed and thus operated by the patient without assistance. Portable hoists consist of a steel mast and chassis on castors, and a spreader bar to which slings are attached. The patient is raised or lowered in the sling as the mast is levered by a hydraulic pump or winding action. A rigid seat may be appropriate instead of a sling for geriatric or very heavy patients. Fixed hoists may be operated by a hand-operated jack system, by chains, or by electricity. Smaller hoists are usually appropriate for confined spaces, such as bathrooms. Hoists should be regularly inspected for safety, and maintenance carried out both for the hoist chassis and for the sling or seat. Electric hoists must be inspected by the electricity board before installation. Slings appropriate to the patient's needs are necessary, and should be of suitable material if the patient has to lie on them for long periods. A hammock sling, rather than one with straps, is most suitable for the severely disabled. Photographs of various hoists in use are included.

STAFF GENERALLY

STAFF COMPLEMENTS

See Abstract No. 806

RECRUITMENT

See Abstract Nos. 810, 813, 814

RELATIONS BETWEEN ADMINISTRATIVE AND MEDICAL STAFF

See Abstract No. 807

SALARIES AND SUPERANNUATION

See Abstract No. 804

STAFF MANAGEMENT

800. METZGER, N. **Personnel administration in the health services industry: theory and practice.** New York, Spectrum Publications, 1975, [xii], 307pp. £9.00.

There is a need to codify the principles and policies of personnel administration in health care facilities. This book has been written to meet this need by providing something more than the philosophy and underlying principles of manpower manage-

ment in hospitals. It directs the reader's attention not only to the 'why' but also to the 'how' of personnel programmes, each chapter dealing with both theory and practice. There are chapters on: historical development; job analysis; job description; job evaluation; wage and salary administration; recruitment, screening and selection; personnel testing; assessing performance; communications; training and development; and the personnel director.

STAFF RELATIONS

801. MAYER-MALY, Th. Mitbestimmung im Krankenhaus. **[Worker participation in the hospital.]** *Krankenhausarzt*, Karlsruhe, 1975, March, vol. 48, no. 3, pp. 106-107, 109-111.

The hospital reform legislation which is being prepared in the individual *Länder* of Western Germany in conformity with the Federal Hospital Act of 1972 includes provision for what are called 'hospital conferences'. The constitution and responsibilities of these committees vary considerably from *Land* to *Land*. This paper points out the differences in the proposed legislation and considers how far these 'hospital conferences' fulfil the requirements on worker participation in the Works Councils Act. The conclusion is that it would be better if provisions for worker participation were excluded from *Länder* hospital legislation since the Federal Hospital Act 1972 does not require such provisions to be made.

802. NASH, A. **Hospital technology: prescription for peace?** *Personnel Management*, London, 1975, March, vol. 7, no. 3, pp. 24-27.

Technology in hospitals is not as significant in the integration of its employees as it is in factories, ships, mines and other economic concerns. The character of work in hospitals does not permit standardization or a high degree of mechanization. Hospital technology may be divided into medical and non-medical. Its nature affects the character of jobs and relations between management and labour. Hospital workers seem to have a greater ability to control the use of their time, movement and pace of work than do unskilled and semi-skilled workers in industry. To test these observations a study was carried out at Montefiore Hospital and Medical Center in New York. A sampling was made of members of seven occupations and interviews were held with administrators, supervisors and union officials. Union representatives believed that hospital workers have more time to relax and work under less pressure than those in industry. There is less specialization so that workers can appreciate their contribution to the total effort of the hospital. Those concerned directly or indirectly with patient care can feel satisfaction when progress is made. Work in hospitals for most employees is more significant, gratifying and relevant and less alienating than work in factories. The existence of high job satisfaction is shown by a table in the text. Hospital technology is important in creating conditions which add to the dignity, self-respect and satisfaction of workers so grievances are limited and the level of industrial conflict is low.

STAFF TRAINING

See Abstract Nos. 777, 805, 811, 815, 816, 878

STAFF WELFARE

803. LUNN, J. A. **The health of staff in hospitals.** London, Heinemann Medical, 1975, xiv, 104pp. £1.50.

At present staff health departments throughout the hospital service are rudimentary or non-existent except in a very few areas. The object of this book is to provide some help and guidance to nurses, doctors and hospital administrators who are concerned with improving or creating staff health departments. It covers: staff; accommodation and equipment; medical examinations; immunization; screening procedures; follow-up after exposure to infection; facilities for sick staff; student and pupil nurses; drugs and prescribing for staff; use of staff for research; sickness absence; accidents, incidence, causes and treatment; environmental surveys; and notes, records and documentation.

SPECIAL CLASSES OF STAFF

ADMINISTRATIVE AND CLERICAL STAFF

See also Abstract No. 807

804. LORCH, G. Bewertung der Dienstposten der Verwaltungsleiter in kommunalen Krankenhäusern. **[Rating of administrators' posts in general hospitals.]** *Krankenhaus Umschau*, Kulmbach, 1975, Feb., vol. 44, no. 2, pp. 86-88.

At present the salary of a hospital chief administrator in Western Germany is determined mainly by the number of beds in the hospital. The salary scales even on this criterion vary considerably from *Land* to *Land*. There are however a number of other factors which should be taken into consideration in determining the salary level. This paper suggests a points system with one point for the first 100 beds and ½ point for each additional 50, one point for each specialist department and for each special function (pharmacy, blood bank, laundry, laboratory, etc.), one point for each paramedical training school, one point for special facilities such as an old people's home, two points for membership of the board of management, and fifteen or thirty points according to the status (senior or chief grade).

805. ÅKER, J. Utdannelse i sykehus- og helseadministrasjon. **[Training in hospital and health administration.]** *Norsk Sykehustidende*, Oslo, 1975, March, vol. 48, no. 3, pp. 62-64, 66-69.

The 1973 Norwegian White Paper on a national basic course in hospital administration covered some 1,000 posts in the higher and middle administration and assumed new recruitment of about 25 graduates a year. It is assumed that the State College of Nursing (Norges Sykepleierhöyskole) will cover the training of nursing administrators. The aim of the course is to provide postgraduate training (including the in-service training of currently serving administrators) at an academic level for at least three years. The theoretical course covers: (i) civics—national and local economy, jurisprudence, sociology and the theory of organizations, and psychology; (ii) health service organization; (iii) medical subjects—medical problematics and terminology,

hospital hygiene and dietetics, and epidemiology; and (iv) administrative subjects with economics—techniques of administration, procedures, personnel management, economics, statistics, operations analysis and computation. In-service training courses comprise a one-year condensed version. The paper is illustrated with a time-table of the four sections of the courses offered at two different centres, and concludes with a detailed syllabus, including the number of hours spent on each topic.

MEDICAL STAFF

See also Abstract Nos. 824, 878, 886

806. McCoy, W. T. **Medical manpower assessment.** *National Hospital*, Chippendale, N.S.W., 1974, Dec., vol. 18, no. 12, pp. 11-16.

Factors which are known to have an effect on the number of doctors required include: (i) patient numbers; (ii) patient expectations; and (iii) patient morbidity patterns. In addition, there are other factors relating specifically to medical staff which will influence numbers, including: (i) specialization; (ii) full-time employment; (iii) teaching; (iv) research; (v) the specialist colleges; and (vi) industrial relations. The author examines all these factors with particular reference to the provision of adequate paediatric services in Australia.

807. Green, S. **Professional/bureaucratic conflict: the case of the medical profession in the National Health Service.** *Sociological Review*, Keele, Staffs., 1975, Feb., vol. 23, no. 1, pp. 121-141.

The theory of professional/bureaucratic conflict rests on the assumption that conflict arises between two groups with different principles of organization, and that conflict will centre on the problems of goals and controls. An investigation was carried out to consider the utility of such a theory in understanding the position of the medical profession in the hospital service. The administrative structure of the service and the nature of the medical profession were examined and three hospitals were observed: (i) a university hospital; (ii) a large general hospital; and (iii) a small hospital providing a limited range of specialties. Contact between doctors and administrators was found to be very limited, so that conflict did not arise as hypothesized. Actual areas of conflict were: (i) competition between groups within the profession for desirable resources or procedures; and (ii) varying perspectives of different specialties on common problems.

NURSING STAFF

See also Abstract Nos. 777, 866, 888, 898, 901

808. L'infirmière à l'hôpital. **[The hospital nurse.]** *Gestions Hospitalières*, Mantes, 1975, Feb./March, nos. 143/144, pp. 117-227.

This special issue contains 17 papers arranged in five chapters: (i) the present position of nurses and nursing in France; (ii) patients' expectations of nurses; (iii) the structure of nursing services and the organization of nursing care; (iv) nurse training; and (v) reflections on the future.

809. CHATER, S. **Understanding research in nursing.** (WHO Offset Publication No. 4) Geneva, World Health Organization, 1975, iii, 36pp.

This booklet is intended for those nurses who wish to know more about research in nursing that leads to the improvement of nursing care. There are chapters on: the relationships between nursing care and research in nursing; an approach to research; the research plan; the research design; implementing the research plan; and selected data collection methods.

810. GILIESPIE, M. M. **Nursing manpower recruitment.** *National Hospital*, Chippendale, N.S.W., 1974, Dec., vol. 18, no. 12, pp. 17-18.

This paper describes the recruitment of nurses for a newly-opened hospital. Before recruitment could begin decisions had to be made concerning: (i) the types of beds to be provided; (ii) the types of services to be provided; (iii) the timing of provision of beds in relation to community demands; and (iv) the types of nursing education to be delivered in the first year of operation. Trained nurses in other occupations were encouraged to return to nursing by the introduction of a six-week refresher course. Guidelines for employment policies were developed from information gained from reviewing other health services established in the area, and job specifications were prepared when these employment policies had been determined. The ground for recruitment was prepared by a series of public relations talks to local organizations, and formal recruitment was started two months before the opening of the hospital. Advertisements were placed in the local, national and professional press, and an information officer was appointed to assist the personnel and other departments in organizing recruitment drives.

811. LEICH, H. G. R. Fachschulausbildung für die Krankenpflegeberufe in der DDR. **[Nurse training in the German Democratic Republic.]** *Krankenhausarzt*, Karlsruhe, 1975, March, vol. 48, no. 3, pp. 126-127.

As from 1 September 1974 the training of nurses (and also of what are called the 'intermediate medical professions' [paramedical staff]) in Eastern Germany will be carried out in technical colleges. The training course for nurses will extend over three years: for the first two years theoretical and practical instruction will alternate while during the third year practical training will be given in depth, normally in the type of health care institution in which the student intends to work. This will mean that nursing training will be limited to fewer places which will make it easier to centralize syllabuses and training programmes.

812. GO, Th.G. Het rendement van verpleegkundige functies. **[Performance of nursing duties.]** *Instelling-Management*, Den Haag, 1975, March, vol. 7, no. 3, pp. 19-22.

An enquiry into the nature and extent of nursing activities on the ward has been carried out by means of the 'individual time/activity record' system. It was found that the ratio between strictly 'nursing activities' and 'care activities' (e.g., bedmaking, food distribution, personal hygiene) was 1:2. Cleaning and transport work occupied 22 per cent of time. The amount of nursing time per patient day varied between 4.0 and 1.8

hours according to the degree of dependency. In order to ensure adequate staffing at peak periods it is suggested that 70 per cent of staff should be full-time and 30 per cent part-time.

813. BIRCH, J. A. **To nurse or not to nurse: an investigation into the causes of withdrawal during nurse training.** London, Royal College of Nursing, 1975, 97pp. £1.85.

After reviewing the literature on withdrawal during nurse training, the author asks what changes occur in the level of motivation among learners as training progresses, and what part the hospital as an educational environment plays in the modification of learners' attitudes, aspirations and persistence in training. He has used a range of standard tests to describe the intellectual and personal characteristics of entrants to both pupil and student programmes, and to explore the differences between those who complete training and those who drop out.

814. SINGH, A. and SMITH, J. **Retention and withdrawal of student nurses.** *International Journal of Nursing Studies*, Oxford, 1975, March, vol. 12, no. 1, pp. 43-56.

In a study in the autumn of 1969 a large battery of tests and questionnaires asking for details of social and educational background was given to students at 18 schools of nursing in England. The students were in their introductory course at hospitals which were running both experimental and traditional types of training. This present report uses the characteristics measured on entry to compare those students still in training at the end of August 1971 with those who had left. Of the 845 students who began nurse training in the autumn of 1969, 131 had left two years later; detailed information was available for only 120 of these. Tables in the text show the leavers by type of course and an analysis of reasons for leaving. These fell into two broad categories: 'academic failures'—those unsuitable for nursing; and 'voluntary leavers'—those leaving on their own initiative. Results are discussed under the headings: personal and social factors (age and social class); type of secondary education; choice of nursing school; intellectual characteristics; non-intellectual characteristics; personality pattern; value pattern (aesthetic and religious values); social attitudes; motivation to become a nurse; age at which nursing was first considered as a career; age at which decision to become a nurse was made; serious consideration of other careers; parental attitudes; motives for choice of nursing; doubts about choice; and satisfaction with nursing. The differences between stayers and leavers which were found through the objective measurements mentioned in the paper are set out in summary form.

OTHER PROFESSIONAL AND TECHNICAL STAFF

815. BURKE, M. J. **The end of a decade: the history and development of the Keele courses.** *Hospital Engineering*, Stevenage, 1975, March, vol. 29, pp. 6-8, 11-14.

The author traces the development of training facilities for hospital engineers, since the first courses for stokers held in 1957, with particular reference to the short residential courses which have been held at Keele University, Staffordshire, since 1964. The courses are held twice a year with tutors drawn from the Department of Health and Social Security, hospital authorities, and universities. The courses to be held in 1975 will be

an intermediate course in July for assistant engineers and an advanced course in December for area, district, sector and hospital engineers.

816. **Training of engineers for senior works posts at area and district levels.** *Hospital Engineering*, Stevenage, 1975, March, vol. 29, pp. 3-5.

This is an abridged version of the report of a working party set up by the Institute of Hospital Engineering which has been submitted to the Department of Health and Social Security (DHSS). The first section proposes courses which would enable trained engineers or fully qualified technicians, now working for health authorities, to gain information about other aspects of the work for which a works manager at area or district level would be responsible. The second section is concerned with the training of school leavers for works management at area and district levels. It urges immediate steps by DHSS towards national sponsorship of both degree and diploma courses in the academic year 1975/76.

ORGANIZATION AND ADMINISTRATION

See also Abstract Nos. 866, 869, 880, 908

817. CHARNOCK, J. **Can the hospitals be managed by objectives?** *Journal of General Management*, London, 1975, vol. 2, no. 2, pp. 36-47.

This paper reports on a research project into some aspects of management in the hospitals of the Coventry area to examine the influence of management by objectives (MbO) on their operations with particular reference to the problem of changes in the National Health Service organization. It concerns itself solely with the medical and nursing spheres, but many of the points made are equally valid for paramedical staffs. After outlining the background facts the paper discusses: differentiation and integration; MbO related to professional views; measurement; clinical leadership; nursing; barriers to leadership and control of consultants; sanctions and incentives; practical action strategies to remove these barriers; and adapting management concepts to the professions. There is not so much a simple resistance to change, though that is the bubble on the surface, as a failure of professionals to achieve a proper understanding of the purpose to which they must be committed if the search for excellence in the service of society, and in accordance with the values of society, is to succeed.

818. GAUTHER, P. H. and others. L'analyse de gestion à l'hôpital. **[The analysis of management in the hospital.]** Paris, Heral, 1974, 135pp.

The author puts forward the case for the introduction of a management by objectives programme into a hospital, and gives a detailed guide to the goals of such a programme and the procedures involved. He concludes with a survey of the qualities which a management consultant must possess.

819. LACHÉZE-PASQUET, P. L'administration de l'hôpital. 3e édition. **[Hospital administration. 3rd edition.]** Paris, Éditions Berger-Levrault, 1974, 333pp.

This volume reviews French legislation on hospital administration and gives guidelines on how it should be implemented. The book is in three sections which deal with: (i) general administration; (ii) personnel; and (iii) financial management.

820. EICHHORN, S. Weiterentwicklung von Struktur und Organisation der Krankenhausbetriebsführung. **[Further development of hospital administrative structure and organization.]** *Krankenhausforschung-Krankenhauspraxis*, Stuttgart, 1975, no. 1, pp. 1-11.

The tripartite management (the chiefs of the medical, nursing and administrative services) which is usual in West German hospitals today will not meet the needs of the future. The weaknesses of the present system are here examined in some detail, and proposals made for a complete restructuring of hospital management. There should be a link between function-oriented and profession-oriented management. Functions are divided into two groups: clinical (medical and nursing care, diagnosis and therapy, medical supplies); and business (general supplies, personnel matters, finance, information, administration). The professional groups are: medical, nursing, diagnosis and therapy, medical supplies, general supplies, technical services, administration, others. The heads of each functional and professional group would together form the full management committee with the heads of the two functional groups forming an inner committee and having a co-ordinating responsibility. According to the size of the hospital there could either be a combination of professional groups, or such groups could be further subdivided: it might also be conceivable that the leadership of a functional group be combined with that of a professional one (e.g., the chief of the clinical functional group could also be chief of the diagnostic and treatment service).

GOVERNING BODIES, COMMITTEES

821. MOTT, A. and CHALK, M. **The board structure has to change!** *Trustee*, Chicago, 1975, Jan., vol. 28, no. 1, pp. 28-30, 32.

Members of advisory boards, health councils and trustee groups are mainly middle or upper class, yet the people who use most of the services and pay most of the bills, either directly or indirectly, tend to be the poor or lower middle class. These people are not therefore really represented in decision making on the services. Greater community involvement in the running of health services must come. It is up to the hospital to decide who shall represent the community on its board, but it is difficult to be sure that as many interests as possible are represented. It is suggested that subcommittees should be set up to analyse: the present make-up of the board; the community served; group or individual representation desired; methods of recruiting new members; barriers to effective community participation; orientation requirements for new members; structural requirements to ensure true community participation; and mechanisms to promote involvement of new members. A problem is that consumers, as they become policy-makers in fact become providers, but if this is recognized safeguards can be introduced to minimize its effects.

822. **A profile of the hospital trustee.** *Trustee*, Chicago, 1975, Jan., vol. 28, no. 1, pp. 21-23, 26.

When the new-style *Trustee* magazine was being planned a survey by questionnaire was made to obtain information about American hospital trustees. A sample of 3,000 readers were circulated. Of the 891 replying 765 identified themselves as current or former trustees. Replies showed that 49 per cent of trustees were between the ages of

50 and 64, 23 per cent between 40 and 49, and 22 per cent were over 65. They came from all walks of life but nearly all were in the upper income brackets and about half were in business, finance or manufacturing occupations. Information given covered: the factors which influence people to become trustees; the duties of trustees; the length of time they have served on these boards; whether they receive any monetary compensation; their influence on hospital expenditure; whether any training is given to the new board member; their involvement with health activities outside the hospital; their views of their institutions; and their frustrations. To provide editorial guidance respondents were asked to indicate their degree of interest in different articles and features. A disturbing finding was how few hospitals provided orientation programmes for newly elected trustees. Statistical tables in the text illustrate some of the findings.

ECONOMICS OF HOSPITAL MANAGEMENT

See also Abstract No. 862

823. HENRYSSON, K. Den framtida rationaliseringen inom sjukvården. **[Future rationalization in hospital care.]** *Sjukhuset*, Göteborg, 1975, vol. 52, no. 2, pp. 79-81.

Between 1966 and 1972 the number of patients admitted to hospital increased by 20 per cent, hospital staff increased by 54 per cent and their hours worked by 42 per cent, the number of hours worked per patient increasing by 22 per cent. Salaries currently comprise 72 per cent of the cost of the health service, whilst administration, amortization, equipment, drugs and other materials are responsible for the remaining 28 per cent. Traditional rationalization usually involves the transfer of tasks from the ward to a centralized service facility, with a saving (of, say, 18 per cent) in ward costs and an increase (of, say, 12 per cent) in auxiliary costs, plus an increased transport and investment cost. Rationalization must be directed towards care of the patient and his hygiene—the most time-consuming part of nursing. Nursing can be simplified by the use of new methods and products. The paper is illustrated with diagrams dissecting the money and time spent on various tasks, particularly in the daytime care of long-stay patients.

824. MORK, T. and others. Seminar om medisinsk rasjonalisering. **[Seminar on medical rationalization.]** *Sykehuset*, Oslo, 1975, vol. 38, no. 2, pp. 65-116.

This seminar was held: (i) to define the problems of increasing the effectiveness of medical tasks and routines; (ii) to systematize future measures; and (iii) to learn from Swedish experience. The five papers given were on: (i) background; (ii) definition of medical rationalization; (iii) what rationalization is and what it can achieve; (iv) the areas in which rationalization is required in Norway; and (v) the work of the Swedish organization SPRI.

825. DAVIS, R. N. **Productivity improvement can cut costs.** *Hospitals*, Chicago, 1975, Feb. 16, vol. 49, no. 4, pp. 49-52.

Since 1970 United Hospital, Port Chester, N.Y., has taken a series of steps to improve productivity: board commitment in 1970; in-depth industrial engineering

studies during 1971; staff reductions beginning in 1971; refinements of reporting and control systems throughout 1971 and 1972; and consolidation and integration of reporting systems beginning in late 1973. The plan has: (i) improved labour utilization from 72 to more than 90 per cent; (ii) reduced the staff by 61 and the payroll by $800,000 a year; and (iii) contained cost increases to 3.0 per cent in 1972 and 6.5 per cent in 1973, compared with the national average of over 10 per cent in both years. Features of the programme include management reporting and control techniques, financial reporting, staff utilization analysis, resource monitoring and management by objectives. The budgeting and related financial reporting systems are the basic and unifying factors for ongoing productivity improvement.

826. Effektiviseringsvirksomhet i sykehussektoren. **[Improving efficiency in the hospital sector.]** *Norsk Sykehustidende*, Oslo, 1975, Feb., vol. 48, no. 2, pp. 35-38, 40-43.

This paper summarizes the report of a Norwegian joint committee. Proper criteria should make it possible to evaluate the efficiency of any hospital or its individual departments and make comparisons on this basis, quantify problems, spotlight bottlenecks, and stimulate interest in increasing efficiency. Tasks at national level involve: (i) ensuring that the health sector gets sufficient funds; (ii) distributing this money to adequate institutions; (iii) ensuring the optimum use of the funds; and (iv) introducing economic and administrative measures which favour efficiency, such as programme budgeting, cost-benefit and value analysis, and the development, purchase and efficient use of biomedical equipment. County authorities are expected to take an active part in effective hospital planning and management. Authority can effectively be centralized in high population density areas but should be left in the hands of the individual institutions in isolated country districts. The most useful rationalization measures are those taken at hospital and ward level, e.g.: analysis and evaluation of drug consumption; centralization of service facilities; rational use of staff resources; rational division of labour on the wards; improvements in working methods and routines; improved planning of admissions; and improved efficiency of auxiliary administrative functions. Norway's efforts are to be co-ordinated by a body within the Central Association of Norwegian Local Authorities (Norske Kommuners sentralforbund).

RUNNING COSTS

See also Abstract No. 825

827. LOWRY, J. C. **Hospital oral dentistry and the patient: some financial aspects.** *Dental Update*, London, 1975, Jan./Feb., vol. 2, no. 1, pp. 17-21.

This paper discusses disease costing in the National Health Service with particular reference to oral surgery. Costs can be divided into: (i) cost to the nation, including hospital costs, sickness and supplementary benefits and value of lost production; and (ii) cost to the patient. Numerical information is presented in tables and a graph. The costs involved emphasize the need for more careful consideration of the time that patients are kept in hospital and the period for which they are certified as unfit for work.

DATA PROCESSING

See also Abstract Nos. 793, 831-835, 846, 887, 892

828. ASHCROFT, J. M. and BERRY, J. L. **A real time patient display system.** *Laboratory Equipment Digest*, London, 1975, March, vol. 13, no. 3, pp. 61, 63, 65.

The computerized patient data display system in the cardio-thoracic department at Wythenshawe Hospital is similar to that at the Caroline Hospital, Stockholm. The department is the main centre for cardio-thoracic surgery in the Manchester area. It consists of a 12-bed intensive care ward and three operating theatres, including two equipped for open-heart surgery. Laboratory facilities are adjacent and the cardiology department, which includes a 10-bed coronary care unit and two cardiac catheterization theatres, works in close relationship. The computer system consists of a Censor 908 processor with 64K bytes of core store, a two mega-byte fixed head disc, paper tape facilities, 10 'Grafoskop' visual display units, 59 push-button intercoms and a hard-copy printer. The Grafoskop terminals can display 12 different graphical pictures per patient as well as tabular pictures for drugs, fluid balance, etc. Besides displaying data the terminals can be used for some input functions. The system maintains records of all patients in different areas. Intercom sets are distributed liberally throughout the whole area with one set by each patient's bedside. These are the primary data-gathering terminals. A planned training programme and frequent informed discussions have helped to dispel apprehension about the scheme initially felt by staff members.

829. BONS, J. P. Automatisering van de informatieverstrekking aan de medicus. **[Automation of information services for the doctor.]** *Instelling-Management*, Den Haag, 1975, March, vol. 7, no. 3, pp. 9-13.

In 1967 the hospitals of four towns in north-east Netherlands (Coevorden, Hardenberg, Hoogeveen and Meppel) decided to work together to provide an efficient regional service. In 1973 an electronic data processing system providing medical information, set up in Hoogeveen in 1969, was extended to cover the participating hospitals. The system, which covers the recording of patient data as well as admission and appointment procedures, is described in this paper.

LIBRARIES

830. INTERNATIONAL FEDERATION OF LIBRARY ASSOCIATIONS. **IFLA hospital library studies.** *International Library Review*, London, 1974, Oct., vol. 6, no. 4, pp. 397-426.

The subjects covered in these studies are: (i) the application and value of library surveys to hospital libraries; (ii) relations between hospital libraries and public libraries in France; (iii) reading in hospitals; (iv) survey of French hospital libraries 1973; (v) the organization of Hungarian hospital libraries; (vi) patients' libraries and work with the disabled, Stockholm public libraries.

ORGANIZATION AND METHODS, WORK STUDY

See Abstract No. 812

MEDICAL RECORDS

831. DRIGGS, M. F., editor. **Problem-directed and medical information systems: selected papers and discussion from the Fourth Annual Scientific Meeting of the Society for Advanced Medical Systems.** New York & London, Intercontinental Medical Book Corporation, 1973, xii, 241pp. $13.60.

The 22 papers in this volume were given by leading physicians, engineers and systems experts and present current philosophy, practices and research directions. The papers are in five sections: problem-oriented medical records; technology for health care systems; ambulatory care systems; evaluation of health care systems; and patient care and advanced medical care systems.

832. PRYOR, T. A. and others. **HELP—a computer system for medical decision making.** *Computer*, Long Beach, Calif., 1975, Jan., vol. 8, no. 1, pp. 34-38.

HELP, a system for Health Evaluation through Logical Processing, was developed in the computer facility at the Latter-Day Saints Hospital, Salt Lake City, Utah. It is based on two Control Data (CDC) 3300 computers, each with 65K of core memory. One is designated the clinical system and the other the research system where all new program development is undertaken. There are 40 terminals on the clinical system and 20 on the research system. To accomplish the decision-making task, three files have been generated; patient data file, decision criteria file and problem file (a problem-orientated record for each patient). The organization and function of the system is described. The HELP system has been operational for more than two years.

833. O'KANE, K. C. and HILDEBRANDT, R. J. **An integrated health care information processing and retrieval system.** In: AFIPS conference proceedings, volume 43, 1974, National Computer Conference and Exposition, pp. 93-105. Montvale, N.J., AFIPS Press, 1974.

This paper describes the design and some initial experiences with a computerized medical record system currently in use in several departments of the Milton S. Hershey Medical Center, Hershey, Pa. The prototype system is written in PL/1 and is being run on Pennsylvania State University's IBM 370/165 computer facility. After 10 months of operation there are about 500 records on the system. The present cost per patient month is about $0.12 using an IBM 3330 disk storage device. The cost per patient record printout varies with size, but is around $0.05 to $0.15 for a moderately large record.

834. CHALICE, R., HARING, O. M. and HOCHSPRUNG, R. **Automated patient record summaries for health care auditing.** In: AFIPS conference proceedings, volume 43, 1974, National Computer Conference and Exposition, pp. 81-92. Montvale, N.J., AFIPS Press, 1974.

Northwestern University Medical Center, Chicago, is currently evaluating a computer-printed summary report showing an out-patient's current condition. The report, an example of which is reproduced, includes: identification data; last hospital admission; problem list; vital signs; diagnosis; medications; diets and other therapy; procedures ordered; routine laboratory tests; other laboratory tests; and comments and suggestions. The reports are maintained, updated and printed by a Control Data 6400 computer at Northwestern University. The present systems design and its use in

the audit of patient care are outlined. An on-line system is now being developed; this will use a Digital Equipment Corporation PDP/11 minicomputer.

835. MACDONALD, A., BLACK, A. and DALL, J. C. L. **The acquisition of patient information using an off-line data collection machine.** *Health Bulletin*, Edinburgh, 1975, Jan., vol. 33, no. 1, pp. 28-37.

This paper describes the collection of patient administrative data in the geriatric unit of Victoria Infirmary, Glasgow, using a Burroughs L2000 programmable data preparation machine. The scheme deals mainly with information on the waiting period, admission, discharge and diagnoses required for in-patients on the Scottish Home and Health Department SMR1 form; more recently, data on patients' social conditions has also been collected. The admission form used and the documents produced by the L2000 are reproduced. An outline of the subsequent valuation, processing and analysis of the data on an ICL 1903T computer is also included. The resultant benefits and experience gained from implementing the system as a pilot study for other developments are discussed.

PUBLIC RELATIONS

836. PRIMS, A. Imago van het ziekenhuis naar de gemeenschap toe. **[The image of the hospital and the community.]** *Acta Hospitalia*, Louvain, 1974, vol. 14, nos. 3/4, pp. 374-389; summaries in French and English pp. 389-390.

Hospitals present a different image to the public, the hospital staff and the authorities responsible for them. The general public regard the hospital as an awe-inspiring institution where extraordinary things happen in mysterious ways and which sometimes stigmatize the patient. Hospital staff have only a limited view of the hospital, do not always understand what their colleagues are doing, and have no proper conception of what the management is aiming at. The authorities look upon hospitals as expensive services whose costs have to be contained while facilities are maintained. Public relations must help hospitals to live up to their ideal as therapeutic communities with good working environments.

LEGAL ASPECTS OF HOSPITAL ADMINISTRATION

See Abstract No. 864

FINANCE AND ACCOUNTING

FINANCE

See also Abstract Nos. 761, 762

837. KRIZAY, J. and WILSON, A. **The patient as consumer: health care financing in the United States.** Lexington, Mass. & London, D. C. Heath, 1974, xxiv, 229pp. £5.60.

This study attempts to unravel the various arguments in the current debate on health care financing in the United States and to put them into an orderly context. Assuming

that some kind of national health insurance plan will be adopted shortly, the authors examined medical services and health care inflation from the stand-point of the cost to the entire community rather than to the individual.

838. HUNDT, W. Wirtschaftliche Sicherung der Krankenhäuser. **[Economic security of hospitals.]** *Krankenhausarzt*, Karlsruhe, 1975, March, vol. 48, no. 3, pp. 95-96, 98-100, 102-104.

This is the text of a paper presented to the health policy congress of the Christian Democratic Union [one of the West German political parties] in November 1974. It deals in detail with the party's programme for the economic security of hospitals which can be summarized as follows: the supply and replacement of capital equipment to be publicly financed; reimbursement for the full cost of in-patient treatment to be guaranteed; hospitals to have a right to economic security; and the freedom and autonomy of hospitals to be maintained.

839. WANTHAL, A. E. **Planning the financing.** *Hospitals*, Chicago, 1975, Feb. 1, vol. 49, no. 3, pp. 103-104, 106-108, 110, 112.

In order to contain the costs of health care facilities the management needs to understand the entire planning process, including the finance. It must make the necessary decisions at the right time, co-ordinate all the experts involved, and manage the planning and financing process as carefully as the construction and operation. The paper includes guidelines under the following heads: managing the process; timing the process; selecting professional advisers; selecting investment bankers; selecting feasibility consultants; and minimizing feasibility study costs. A table sets out the essentials of nine alternative debt financing methods.

840. LAW, S. A. **Blue Cross: what went wrong?** New Haven & London, Yale University Press, 1974, x, 246pp. £4.50.

This volume is a collective effort of the Health Law Project of the University of Pennsylvania. It is in two parts: (i) an analytical description of Blue Cross, its history, its status under state law, its relationship to state regulatory agencies, its internal governance, the relationship between local plans, the Blue Cross Association and the American Hospital Association, and the legal role and status of Blue Cross under the federal health insurance programmes; and (ii) the role of Blue Cross with respect to two major problems—reimbursement for hospital services and review of the medical necessity of hospital services provided to individuals.

CATERING, DIETETICS, KITCHENS

HOSPITAL CATERING

841. Industrieel bereide diepvriesmaaltijden in het ziekenhuis. **[Industrially prepared deep-frozen food in the hospital.]** *Instelling-Management*, Den Haag, 1975, March, vol. 7, no. 3, pp. 27-31.

The 350-bed St. Franciscus Hospital, Roosendaal, has gone over to meals prepared

from commercially produced deep-frozen individually-packed meal components (meat, vegetables and potatoes). Soup, salads and sweets are conventionally prepared in the hospital. Meals are on a 14-day cycle and each day patients have a choice of three dishes and three different vegetables. Patients are visited by a hostess each morning when they choose their food for midday, evening and the next day's breakfast. It has been found that 95 per cent of all diets can be provided from the deep-frozen range. Heating of dishes takes 40 minutes.

HYGIENE IN THE HOSPITAL KITCHEN

842. HARDER, E. L. **Developing an effective food sanitation program.** *Hospitals*, Chicago, 1975, Feb. 16, vol. 49, no. 4, pp. 93-96.

A good food hygiene programme begins with the establishment of the following basic operating standards: (i) food specifications must be developed; (ii) controls must be established for the receiving, handling and storage of material and equipment; (iii) stock must be rotated and inventory managed so that perishable foods are used first; (iv) food should be stored at 40°F or lower and heated above 140°F; and (v) dish-washing must be done without a crossing of traffic between clean processed food and dirty dishes. Staff standards must also be established and in-service training is essential. A number of hygiene considerations should be considered in planning and designing a catering department. These include: single production flow; minimum handling of supplies; quality control at every point in the production flow; compact work areas; temperature of 55 to 65°F; equipment to meet national standards; careful evaluation of the adequacy and safety of water, steam and heat; adequate floor drains; smooth, non-skid, easily cleanable floors; adequate toilet facilities; protection against rodents and insects; and protective signalling systems.

LAUNDRIES AND LINEN SERVICE

LAUNDRIES

843. GIANCOLA, D. **The inhouse laundry and linen service.** *Hospitals*, Chicago, 1975, Feb. 16, vol. 49, no. 4, pp. 97-99.

Many hospitals have established co-operative laundry arrangements as a practical and economical alternative to in-house laundry operations. But for hospitals in outlying areas, shared services may be impracticable. However maximum benefits can be derived from an in-house laundry if a total system approach is used. Essential aspects include: a laundry manager who is fully accountable for the service; adequate inventory and piece count; soiled linen sorting; evaluation of the linen mix; adequate linen control; and use of cost per patient day rather than cost per pound of linen.

844. BIEN, F. Planung und Rationalisierung von Krankenhaus-Wäschereien. **[Planning and rationalization of the hospital laundry.]** *Krankenhaus Umschau*, Kulmbach, 1975, Feb., vol. 44, no. 2, pp. 64-69.

This paper sets out guidelines for the planning of new hospital laundries and the

modernization of existing ones. A check list of questions to be answered at the very earliest stage of planning is given. The space required, the machinery needed, the arrangement of rooms, the organization of work flows and staff complements are among the aspects considered. Hospital laundries are concerned not only with the cleaning of linen but with preventing the transmission of infection.

HOSPITAL LINEN AND TEXTILES

See Abstract No. 843

HOSPITAL DOMESTIC MANAGEMENT

DOMESTIC WORK

845. NYSTRÖM, B. Sjukhushygieniska synpunkter på sjukhusstädning. **[Hospital hygiene views on hospital cleaning.]** *Sjukhuset*, Göteborg, 1975, vol. 52, no. 2, pp. 53-56.

Infection depends on an infective agent being transferred from a source to a susceptible individual. Cleaning is a vital measure in the reduction of sources of infection. The routine use of disinfectants in floor-cleaning must stop: disinfectants should only be used in cleaning up after an infectious patient. Floors must always be cleaned with methods that do not raise dust—damp mopping, swabbing, etc.—and the utensils used must also be free from bacteria. Such chemical disinfectants and materials as *are* used should be selected on the basis of expert bacteriological assessment. The cleaners must adhere to the same hand-hygiene rules as apply to the rest of the hospital staff. When carrying out disinfection procedures after an infectious patient has been discharged, the cleaner has the right to be told what disease the patient had. In the event of viral hepatitis five per cent chloramine or 1.2 per cent (or stronger) K 644 must be used. Face masks give a feeling of security but are unnecessary. An increased level of training for cleaning staff would increase their social status and cut staff turnover.

846. BACKLUND, H. Erfarenheter av städuppläggning med hjälp av dator-städkalkyl. **[Experiences in reducing cleaning with the help of automated cleansing calculations.]** *Sjukhuset*, Göteborg, 1975, vol. 52, no. 2, pp. 72-73.

Kommun-Data, the Swedish local authorities' computer centre, retains a record of the results of the Swedish governmental enquiry into local authority cleaning methods, frequency, and time and motion values. The authority adds details such as type and area of room, flooring, etc., for local storage. These two sets of data are presented as work lists: the facility also prepares work plans, although these are not used very much. The system is currently (August 1974) used by 56 local and two national authorities (48 schools, 20 offices, 34 nurseries and three other areas) and costs about 15 to 20 Swedish örer per sq.m. Cleansing calculations are based on simple, easily filled-in forms, are rapidly processed, and are readily amended should changes need to be made in frequency and method. A flexible system of calculation has proved its worth and will undoubtedly continue to be required.

HYGIENE IN THE HOSPITAL

HOSPITAL INFECTIONS

847. LEDGER, W. J. and others. **Bacteremia on an obstetric-gynecologic service.** *American Journal of Obstetrics and Gynecology*, St. Louis, 1975, Jan. 15, vol. 121, no. 2, pp. 205-212.

To obtain an overall view of bacteraemia in obstetrics and gynaecology, a one-year survey was undertaken at the Women's Hospital of the Los Angeles County-University of Southern California Medical Center. During the period of review (August 1972 to July 1973) there were 19,350 admissions to the hospital. Blood cultures were obtained from 1,410 patients and bacteraemia was confirmed on 144 occasions in 139 patients (9.9 per cent of those sampled). Patients with bacteraemia represented an incidence of seven per 1,000 admissions, while Gram-negative rods were recovered from the blood in 60 instances—an incidence of 3.1 per 1,000 admissions. Of the bacteraemia episodes 35 followed community-acquired infections and 109 were hospital-acquired (75.7 per cent). The majority of the 139 patients were pregnant or immediate post-delivery or post-abortion patients. Four patients in the series died from sepsis. Tables and a diagram in the text illustrate some of the results of the survey. Findings commented on are the high proportion of hospital-acquired infections, the low death rate and the low incidence of gastro-intestinal bleeding, hypotension and shock. The most frequently recovered aerobe was *Escherichia coli* but the Gram-positive anaerobes were more frequently isolated. Microbiological considerations are discussed and the clinical settings requiring special therapeutic considerations are described. Cancer patients represent the most difficult management problems on an obstetric-gynaecological service because they are usually older and more debilitated, have had extensive operations, need hyperalimentation to maintain nutritional balance and are often exposed to dangers which affect their response to infection.

SOURCES OF INFECTION

See also Abstract No. 850

848. GRAEVENITZ, A. von. Mögliche Quellen gramnegativer Hospitalinfektionen. **[Potential sources of Gram-negative hospital infections.]** *Fortschritte der Medizin*, München, 1975, March 13, vol. 93, no. 8, pp. 386-390.

This is a review of the literature (with 64 references) on the sources of hospital infections with Gram-negative bacteria. Among the sources listed are the following: non-sterile intravenous fluids; catheters, needles or cannulae; contaminated fluids or semi-solid substances; inhalation apparatus; contaminated rubber; hydrotherapy equipment which has not been disinfected; food, drinking water and peroral drugs; dialysis apparatus; and nurses' hands. Some probable but rare sources are: wash-basins; air humidifiers and incubators; suction and resuscitation equipment; wash bowls; flower vases; mops; crockery and cutlery; carbon dioxide absorbers in anaesthesia equipment; and stethoscopes.

849. BERKOWITZ, D. M. and others. **Adhesive tape: potential source of nosocomial bacteria.** *Applied Microbiology*, Washington, 1974, Oct., vol. 28, no. 4, pp. 651-654.

During a seven-day period, a variety of bacteria, including opportunistic ones, were recovered from 23 rolls of adhesive tape being used in a 16-bed intensive care unit. All rolls of tape were sterile when received from the manufacturer. Mixed flora was recovered from a total of 15 rolls, whereas eight yielded pure cultures. Organisms recovered included *Staphylococcus aureus*, *Pseudomonas aeruginosa* and various species of Enterobacteriaceae. Although no infection arising directly from the contaminated tape has been documented it is felt that a potential source of infection has been identified. Such tape may contaminate the hands of staff who handle it or directly contaminate patients since it is widely used to secure artificial airways and various drainage tubes.

PREVENTION AND CONTROL

See also Abstract No. 845

850. CHAVIGNY, K. H. **The use of polymixin B as a urethral lubricant to reduce the post-instrumental incidence of bacteriuria in females: an exploratory study.** *International Journal of Nursing Studies*, Oxford, 1975, March, vol. 12, no. 1, pp. 33-42.

The author begins by briefly reviewing the literature relating to the size of the problem of urinary tract infection and associated instrumentation, the epidemiology of predisposing factors associated with bacteriuria, the consequences of bacteriuria and methods which reduce post-instrumental bacteriuria. The study described was designed to test the efficacy of an antibiotic barrier placed in the urethral orifice before insertion of the self-retained catheter. The obstetrical/gynaecological service was chosen to provide a continuous source of catheterized female patients. An experimental group of 50 patients aged between 15 and 50 was selected according to criteria set out in the paper. A control group of 50 was selected by the same criteria. Sampling was purposive and selected serially into two groups using the same locations and the same nursing and medical staff. The method and materials used in the study are described and there is an analysis of the data followed by discussion. Results indicate that a more controlled approach to the investigation of this problem is justified, particularly in regard to the short-term indwelling catheters. Three tables of statistics are included and a list of 14 references is given.

851. O'BRIEN, T. F., KENT, R. L. and MEDEIROS, A. A. **Computer surveillance of shifts in the gross patient flora during hospitalization.** *Journal of Infectious Diseases*, Chicago, 1975, Feb., vol. 131, no. 2, pp. 88-96.

Patients carry certain strains of bacteria and whilst in hospital may acquire others which can infect them. These strains which colonize and infect patients should be regularly isolated, so that the spread of infection may be tested and limited if possible. The studies described show how information on these strains and the rate at which they are found can be related to the length of time spent in hospital, using computer techniques. Information was gathered on the gross patient flora, which included some strains which were not infective. A series of graphs shows the results of sampling and

analysis for infective patient flora, and indicates increases and decreases in various types of flora relative to the length of hospitalization. Routine monitoring of this type could augment existing methods of patient control, and comparisons between various hospitals using different methods of combating such infections could be made more accurate and valuable.

852. MITTERMAYER, H. and ROTTER, M. Vergleich der Wirkung von Wasser, einigen Detergentien und Äthylalkohol auf die transiente Flora der Hände. **[Comparative investigations on the efficacy of tap water, some detergents and ethanol on the transient flora of the hands.]** *Zentralblatt für Bakteriologie, Parasitenkunde, Infektionskrankheiten und Hygiene*, 1. Abteilung, Originale, B, Stuttgart, 1975, March, vol. 160, no. 2, pp. 163-172.

A series of experiments has been carried out in order to determine the effect of tap water, soap, pHisoHex, pHisoDerm, and 70 per cent ethyl alcohol on the bacterial infection of hands. Ten persons, whose hands had been artificially infected with *Escherichia coli*, each washed for one, two or four minutes. The results, which are set out in a series of tables and graphs, show that there was a highly significant reduction in contamination after washing for one minute (even with water alone). Except in the case of ethyl alcohol, however, there was a slowing down in the reduction of contamination for longer periods of washing. The conclusion is that pHisoDerm is the most effective hand disinfectant.

HYGIENE IN THE OPERATING THEATRE

853. LEBOURDAIS, E. **Bacterial shedding in OR.** *Dimensions in Health Service*, Toronto, 1975, Feb., vol. 52, no. 2, pp. 27-28.

When there is evidence of theatre infections involving a particular strain of *Staphylococcus aureus*, the staff should be tested and identified carriers examined for dispersal potential. If a disperser is found who cannot be transferred from theatre duty the dispersal site should be identified and ventile clothing worn to protect it. There is an apparent higher incidence of *S. aureus* infection in males and an increasing use of female surgeons and anaesthetists might lead to reduced infections.

STERILIZATION

854. OLSSON, O. and HOBORN, J. Vad skall man sterilisera på sjukhuset och varför? **[What should be sterilized and why?]** *Sjukhuset*, Göteborg, 1975, vol. 52, no. 2, pp. 58-60.

Instruments and linen can be supplied to wards and operating theatres at any degree of sterility desired, providing cost is no object, but they do not have to have been unpacked, touched or in use long for the bacteria count to be far from aseptic. It is obvious that gastroscopes, bronchoscopes and cystoscopes must be sterile, but manufacturers must produce optics that will stand sterilization. Disposables have replaced re-usable materials to a great extent, on the grounds of both economy and hygiene.

Like home air, factory air is virtually free of pathogenic spores. Hospitals should purchase factory-clean products from licensed factories subject to bacteriological inspection. Instruments sold in plastic wrappings as 'unsterilized articles from an inspected factory' cost 12 to 18 per cent less than sterile products, at no increased risk of infection. Ethylene oxide sterilization is an inexpensive way of reducing the need for pre-sterilization. Hospital authorities should relax their demands for unnecessary sterilization, and manufacturers should aim to mass-produce clean products free from pathogenic bacteria.

SAFETY MEASURES

PLANNING FOR MASS EMERGENCIES

855. MacKay, I. **The management of mass casualties.** *Dimensions in Health Service*, Toronto, 1975, Feb., vol. 52, no. 2, pp. 19-20.

At the hospital level the sorting of casualties should be done by the most experienced surgeons available. Four main categories can be distinguished: minimal, the 40 per cent of ambulant cases who should be diverted to minor treatment areas; immediate, the 20 per cent in urgent need of resuscitation or surgery; delayed, the 20 per cent who need urgent surgical care but whose survival will not be seriously affected by delay; and the final 20 per cent with a low treatment priority because the amount of care needed is out of proportion to their chances of survival. Most hospitals are not designed to deal with mass casualties; what is needed is a large open area with little fixed furniture. The maximum capacity of a doctor is the care of 25 casualties per hour for a maximum of 16 hours. A telephone calling system should be practised at least twice a year.

THE PATIENT

ADMISSION AND RECEPTION

856. Quaethoven, H. Onthaaldienst en sociale dienst. **[Patient reception and social work.]** *Acta Hospitalia*, Louvain, 1974, vol. 14, nos. 3/4, pp. 316-327; summaries in French and English p. 328.

At the 633-bed Virga Jesse Hospital, Hasselt, Belgium, there are six hostesses who welcome the incoming patient, supply him with information, and accompany him to the ward. The hostesses also deal with emergency admissions, accompanying relatives to the mortuary, and act as guide to visitors. The three special workers deal with about 40 new patients a month and there are usually between 100 and 110 being advised: each case entails on average 13 contacts with the patient himself as well as many others inside and outside the hospital. More than half the caseload consists of patients over 65: neurology and psychiatry are the other specialties most commonly involved.

857. ORADEI, D. M. and WAITE, N. S. **Admissions conferences for families of stroke patients.** *Social Casework*, New York, 1975, Jan., vol. 56, no. 1, pp. 21-26.

The stroke unit at the Veterans Administration Hospital, West Haven, Conn., includes a four-bed intensive care unit for acute cases. Patients remain in intensive care for five to seven days and are then transferred to a 12-bed post-acute unit. At the time of admission their medical, nursing and social needs are assessed by a multidisciplinary health team and treatment and rehabilitation goals are established in conjunction with the patient and his family. Family admissions conferences were developed as a routine procedure to improve the general level of care. The aim of these was: to ascertain the families' views on the patients' normal personality and his experience of and attitudes towards illness; to find out about family relationships; to understand the families' worries about hospital care; to enable the families to meet the staff, and to find out about the treatment and the effect of the stroke on the family; and to extend the knowledge, understanding and skills of nurses and social work and nursing students in dealing with families. Conferences are held with families or friends and neighbours within a few days of the patient's admission. A review of the records of 52 conferences identified five main areas of concern: (i) prognoses and future needs; (ii) immediate condition and care needed; (iii) influence of past experience of illness, hospitals, etc.; (iv) implications of the patient's altered status in the family; and (v) the cause and onset of the illness. Several case histories are given in the paper and the impact of the conferences on families and staff is outlined.

WELFARE OF THE PATIENT

See also Abstract Nos. 856, 857

858. LORENZ, H. Patientenbefragung—ein Instrument für die Leistungs- und Qualitätskontrolle in Krankenanstalten. **[The patient questionnaire—an instrument for performance and quality control in hospitals.]** *Krankenhaus Umschau*, Kulmbach, 1975, Feb., vol. 44, no. 2, pp. 61-63.

The best way to get patients' views on the hospital, and thus to get information on the performance and quality of the services, is by way of a questionnaire which the patient fills up while still on the ward. Complete anonymity must be guaranteed. Ideally questionnaires should be completed by all patients over a period of a year: at the least the enquiry should extend over three months. With the questionnaire patients should be given an explanatory note. Patients should be able to put their completed forms into a locked box. Questionnaires can be processed by computer. Patients should also be given an opportunity to make suggestions for improvements.

859. BREMER, J. Psychologische kenmerken van de ziekenhuissituatie. **[Psychological characteristics of the hospital environment.]** *Acta Hospitalia*, Louvain, 1974, vol. 14, nos. 3/4, pp. 220-239; summaries in French and English pp. 239-240.

This discussion of the psychological characteristics of the hospital situation is based on 10 propositions. These are: regression is used in error as a model for explaining patient behaviour; hospital staff persist in regarding patients as children; regression theory becomes in this way a self-fulfilling prophecy; interhuman relationships in

hospital fall behind those in society; the tendency to isolation creates a barrier between the sick and the healthy; the ill person has a different view of his environment; the in-patient's perspectives of time and space are different; the accent on physical problems leads to the neglect of psycho-social ones; the patient is expected to adjust to the hospital rather than vice versa; and the patient's wishes and priorities differ from those of the hospital.

860. NUYENS, Y. Sociologische benadering van het ziekenhuis. **[Sociological approach to the hospital system.]** *Acta Hospitalia*, Louvain, 1974, vol. 14, nos. 3/4, pp. 241-275; summaries in French and English pp. 275-276.

This detailed study of the reaction of patients and staff to hospital conditions is based on published reports and other evidence. The conclusion is that the feeling of uneasiness stems mainly from the subdued role of the patient vis-a-vis the staff and from the general hospital system. The hypothesis is put forward that hospitals are pursuing such objectives as institutional integrity, meeting physical needs, increased output, and optimal performance while neglecting the expectations of the patient. A restructuring of hospital functions is proposed.

861. ALBERT, S. **Storefront converted to health education center.** *Hospitals*, Chicago, 1975, Feb. 16, vol. 49, no. 4, pp. 57-58.

Lenox Hill Hospital, New York, has converted a shop in its area into a health information centre. It has literature, educational exhibits and audiovisual programmes. It is staffed by the hospital's community relations department and by trained volunteers. The centre opens on weekdays from 10.00 to 16.00 and on Thursday evening from 16.00 to 19.30. It is visited by approximately 1,200 persons per month; school biology and health classes also visit the centre. The staff also conduct free health screenings, teaching sessions and special educational exhibits.

HOSPITAL SOCIAL WORK

862. SIMMONS, J. C., COOLEY, E. D. and HUNT, R. S. **Social work program meets hospitals' unique needs.** *Hospitals*, Chicago, 1975, Feb. 16, vol. 49, no. 4, pp. 64-66.

Hahnemann Medical College and Hospital, Philadelphia, makes its social work services available to many community hospitals that require additional social work support or do not have their own professional social work departments. The areas chosen for sharing were: in-service education; social work policy formulation, including procedure manuals; supervision by experienced social workers; use and review assistance; and social work disposition planning. A few general principles have evolved: (i) there is a need for early referral of patients to social work; (ii) there is a need to refer more patients to social work; (iii) the good social worker must be as knowledgeable as possible about medical diagnosis; and (iv) good community relations are fostered by a social work department.

863. HOOGH, F. D' Morele, godsdienstige of filosofische bijstand aan gehospitaliseerde patiënten. **[Moral, religious and philosophical assistance to patients.]** *Acta Hospitalia*, Louvain, 1974, vol. 14, nos. 3/4, pp. 329-357; summaries in French and English pp. 357-358.

This paper gives details of instructions on pastoral care for hospital in-patients put out by the Belgian Ministry of Health. The author considers that insufficient attention is at present given to this aspect of patient care and pleads for an upgrading of the status and function of the hospital chaplain. Many quotations are made from published work and there are 44 references to Dutch, Belgian and United States literature on the subject.

THE GENERAL PRACTITIONER AND HIS PATIENTS

See Abstract No. 900

TRANSPORT OF PATIENTS

See also Abstract No. 894

864. ROZOVSKY, L. E. **Ambulance service and the law.** *Dimensions in Health Service*, Toronto, 1975, Feb., vol. 52, no. 2, pp. 31-33.

In Canada ambulance drivers must obey the law relating both to commercial vehicles generally and to ambulances specifically. This may vary from province to province. In Quebec, for example, the law requires ambulance drivers to have attained certain educational levels, to have taken courses in 'preventive driving', to have passed special medical examinations, and to be of good character and not addicted to drugs or alcohol. Unless the law specifically grants such rights ambulances may not pass a stop signal or carry flashing lights. Even where such action is allowed the ambulance driver must exercise caution in relation to other road users. The general law of negligence applies to ambulance drivers and attendants in the same way as to doctors and nurses.

HOSPITAL CARE

See also Abstract Nos. 823, 890, 901

865. BLANPAIN, J. Patiënt-gerichte organisatie van het ziekenhuis. **[Patient-centred care in hospitals.]** *Acta Hospitalia*, Louvain, 1974, vol. 14, nos. 3/4, pp. 391-401; summaries in French and English p. 401.

The author considers that doctor-oriented management, excessive orientation towards resources and progressive centralization of services are some of the main reasons for hospital care not being patient-centred. This situation could be improved by introducing progressive patient care (with the needs of the patient determining the organization), team nursing, and some decentralization of such items as food service, laundry service, and housekeeping.

866. KOENE, G. Personeelsbeleid en patiënt. **[Personnel management and the patient.]** *Acta Hospitalia*, Louvain, 1974, vol. 14, nos. 3/4, pp. 359-372; summaries in French and English pp. 372-373.

This paper is concerned with nursing care and the organization of nursing. What is called 'task' or 'functional' nursing, in which a number of different nurses look after the same patient, is considered to be a disintegrating approach: it makes it difficult for the nurses to grasp the overall needs of a patient and leads to frustration for both nurse and patient. Team nursing with nurses assigned to specific patients, can lead to improvement in two respects. The nurse is offered greater job satisfaction and better patient-centred care is provided.

867. ROBERTSON, L. S. and others. **Changing the medical care system: a controlled experiment in comprehensive care.** New York & London, Praeger, 1974, xvi, 182pp. £6.50.

In 1954 Harvard Medical School and three of its affiliated teaching hospitals, Children's Hospital Medical Center, Boston Hospital for Women and Peter Bent Brigham Hospital, launched the Family Health Care Program, which was designed to provide primary health and medical care to a group of families. By 1964 sufficient experience had been gained to evaluate the system of service and teaching that had been developed. This volume is a report of the revaluation project. Its nine chapters are on: medical care—system or disorder; methodology and experimental treatment; engagement in comprehensive care; use, attitudes and cost; the problem of morbidity; race and care; the issues of social pathology; middle-class physicians and lower-class patients; and the medical care system reconsidered. A list of 125 references to the literature is included.

868. GOLDSTEIN, R. L. and others. **Data for peer review: acquisition and use.** *Annals of Internal Medicine*, Philadelphia, 1975, Feb., vol. 82, no. 2, pp. 262-267.

In 1971 the Experimental Medical Care Review Organization (EMCRO) programme of the United States Bureau of Health Services Research began to test practical methods of reviewing, for whole geographical areas, what the doctor does for a patient and the end results of treatment in different medical care settings. Quality of care is defined by the EMCROs as the extent to which scientifically established procedures in diagnosis and management are properly applied to patients who can benefit from their application. There are two tiers of criteria; (i) the 'what' of care; and (ii) the 'how well'. Most EMCROs review only the 'what', that is, the procedures which should be performed in usual circumstances on patients with suspected or established diagnoses. The EMCROs base their reviews on one or more of the following: (i) explicit criteria which rely on predetermined items of diagnosis, treatment and management set by group agreement; (ii) written clerical guidelines for insurance claim form review; or (iii) implicit criteria which rely on the subjective opinion of the individual reviewer. In this paper the authors focus on three major problems encountered by the EMCROs: (i) determination of the amount of information required for review; (ii) the cost of data acquisition and use; and (iii) the reliability of the data. Methods of review are described and initial results from the EMCRO programme are presented. It is thought that the experience in the acquisition and use of data may provide a basis for the development of Professional Standards Review Organizations which were made mandatory in 1972.

HOME CARE, AFTER-CARE

See Abstract Nos. 882, 883, 897, 898, 910-912

SPECIAL DEPARTMENTS

OPERATING SUITES

See Abstract Nos. 786, 792

PHARMACY

See also Abstract No. 881

869. BROWN, A. W., BARRETT, C. W. and HERXHEIMER, A. **Hospital pharmacy committees in England: their structure, function, and development.** *British Medical Journal*, London, 1975, Feb. 8, vol. i, pp. 323-325.

A questionnaire on the structure and role of pharmacy committees in hospitals was completed by 150 chief and group chief pharmacists in England. Just over half of the hospitals had such a committee. About two-thirds of these dealt only with pharmacy matters; about one-third dealt also with other matters. The number of new committees increased slowly until 1967 and then showed a sharp rise. Terms of reference, membership and manner of appointment vary greatly. The most common subject dealt with was the introduction of new prescribing sheets. Other prominent topics were the cost of drugs, guidelines for use of intravenous infusions and addition of drugs to them, and security of drugs. Many of the respondents believed that the work of the committees, often with the help of smaller, more specialized groups, had significantly improved various aspects of the local supply and use of drugs.

870. DAY, A. **Pharmaceutical aspects of a leukaemia unit.** *Pharmaceutical Journal*, London, 1975, March 29, vol. 214, no. 5811, pp. 255-256, 272.

The Medical Research Council leukaemia unit at Hammersmith Hospital, London, especially the clinical facilities (the 'anaemia' unit), imposes a heavy burden on the hospital pharmaceutical service. The anaemia unit, opened in 1971, has eight single rooms and there are facilities for reverse barrier nursing and the use of plastic patient isolators. Patients generally have a lowered resistance to infection. Apart from routine drugs usual for any medical ward the drugs issued fall into three main categories: cytotoxic drugs; drugs for antimicrobial prophylaxis; and antibiotics used in the treatment of infections. The plastic isolator provides a protected area equipped with bed, chair and other necessities, completely sealed off from the outside environment and ventilated with sterile air. Isolation may last for weeks or sometimes months for some patients. Special care has to be taken to ensure that drugs entering the isolator do not contaminate the patient or his environment. Most of the medication is oral and since little or nothing is known of the effect of heat or radiation sterilization on individual drug forms reliance has to be placed on the manufacturers' unopened containers. Daily or single doses are transferred aseptically into previously sterilized glass jars. So far all

problems relating to sterile medication have been solved. Besides its work for patients the pharmacy also plays an active part in the clinical trials carried out in this unit.

871. HOOD, J. C., LEMBERGER, M. and STEWART, R. B. **Promoting appropriate therapy in a long-term care facility.** *Journal of the American Pharmaceutical Association*, Easton, Pa., 1975, Jan., vol. NS15, no. 1, pp. 32-33, 37.

Pharmaceutical services at a 100-bed long-stay care facility in North Central Florida were provided by a community pharmacist, who spent approximately 2½ hours daily at the institution. This paper reports a study which aimed to: (i) determine if a pharmacist could reduce the number of medications used; (ii) monitor drug therapy; and (iii) document other areas in which a pharmacist can contribute in the long-stay facility. The results of the study are presented in four tables and discussed. The study showed that the pharmacist can play an important role in the care of long-stay patients by active involvement in patient care.

872. FISH, K. H. and COOPER, J. W. **A system for drug-drug-interaction detection.** *Journal of the American Pharmaceutical Association*, Easton, Pa., 1975, Jan., vol. NS15, no. 1, pp. 28-31.

This paper describes a non-computerized system for the detection of potential drug-drug interactions. It makes use of two books, *Drug interactions* by P. D. Hansten and *Evaluations of drug interactions* 1973 published by the American Pharmaceutical Association, and four sheets of paper: (i) drug interaction alert list; (ii) drug-drug interaction index; (iii) drug-drug interaction flow chart of the steps to be taken in surveillance for potential interactions: and (iv) patient medication profile. On receiving a new prescription the pharmacist obtains these four sheets; the procedure followed is outlined. The system, which could be computerized, enables the pharmacist to screen all new prescriptions quickly and can be readily assimilated into normal pharmacy routine. The four sheets used are reproduced.

873. PHILLIPS, M. **Monitoring and recording drug use in long-stay hospitals.** *Pharmaceutical Journal*, London, 1975, Feb. 15, vol. 214, no. 5805, pp. 136-137.

The range of medicaments normally used in hospitals for the mentally handicapped is limited, with patients often remaining on the same medication for long periods. Conventional prescription sheets, however, are mostly suitable for patients receiving a drug for shorter periods. Pharmaceutical departments, particularly in general hospitals, frequently have little control over the administration of medicines in hospital wards. The 1,200-bed Botleys Park Hospital has a scheme for all frequently-used medicines which allows monitoring of prescriptions by the pharmacy. A separate medication card is prepared for each drug prescribed; it shows the patient's name and ward, dose and times of administration. These cards are then kept inside a prescription holder with the original prescription sheets, against which they are checked whenever the drug is administered. A new record card, noting the daily administration of a drug to a patient, has been designed as part of the new drug recording system. The cards are used for all drugs, either prescribed individually or from the ward's central stock and show the times of administration, times when the medicine was not administered and the reasons for this, and the date when its administration should be reviewed, usually 28 days after prescription. Only scheduled poisons are unsuitable for recording in this

way, since they are infrequently used. The system has increased efficiency, and could be used in any long-stay hospital or for geriatric units attached to general hospitals. Diagrams of the medication and patient record cards are included.

874. McMULLEN, P. **Drug distribution and administration in a geriatric hospital.** *Journal of Hospital Pharmacy*, London, 1975, Feb., vol. 33, no. 1, pp. 9, 11, 13.

Following a nurses' questionnaire circulated at Ladywell Hospital, Salford, it was evident that problems arise during drug rounds in large geriatric wards, of which there are five at Ladywell. The rounds took between 60 and 90 minutes, and nurses felt that most problems were connected with selecting the correct drug for each patient and getting confused patients to take medicine, particularly when it was unpleasant or provided in a difficult form such as large tablets. At this time, commonly used items were distributed in stock bottles, and other items which made up the bulk of medication were individually dispensed. A pilot scheme was then established on one ward, using a Ross trolley [see *Hospital Abstracts*, Vol. 7, Abstract 149]. All items were individually dispensed into drawers labelled with the patients' names, and a range of stock aperients was also provided. The trolley was serviced weekly, and the pharmacist visited the ward regularly to interpret new prescriptions. In suitable cases, the sister was asked whether a solid or liquid form of the drug would be appropriate. The drugs round was timed for each of the 10.00, 13.00 and 17.00 duties, for one week before the pilot scheme began and after two weeks and two months. This showed the time for the 10.00 round had decreased by 46 per cent, for the 13.00 round by 24 per cent, and for the 17.00 round by 41 per cent. No increase in pharmacy staff time was recorded, perhaps due to the wide range of drugs in use on this ward, but might occur in future if drugs for use on Ross trolleys were pre-packed on an area basis.

875. MATTAR, M. E., MARKELLO, J. and YAFFE, S. J. **Pharmaceutic factors affecting pediatric compliance.** *Pediatrics*, Evanston, Ill., 1975, Jan., vol. 55, no. 1, pp. 101-107.

Studies were undertaken in the United States to see to what extent treatment instructions to child out-patients with otitis media were complied with; measures to counter low compliance were devised and implemented. A study of 100 children aged from one to 12 years showed that full compliance was present in only five per cent. Reasons for incomplete compliance included: inadequate dispensing of medicines at pharmacies, including incorrect instructions on the label; difficulty in getting the medicines because the pharmacies were closed or the brand was not available; difficulty of parents in keeping to the prescribed schedule; lack of knowledge of drugs on the part of parents; spilling medicines; getting the children to swallow the medicine; and difficulties of one-parent families in administering drops to young children. The second study compared the compliance of 33 children receiving medication and advice from the hospital pharmacy with a control group of 200 children getting medicines from community pharmacies. In patients attending the hospital pharmacy full compliance was achieved by 51 per cent compared with 8.5 per cent in the control group. Families attending the hospital pharmacy realized the importance of finishing the medicine, kept more strictly to the schedule and recorded the doses given. Labelling was complete and detailed and patients needing liquid medicines were given a calibrated medicine tube. The studies emphasize the important role of the hospital pharmacist in the care of child out-patients.

876. KABAT, H. F., MARTTILA, J. and STEWART, J. **Drug utilization review in skilled nursing facilities.** *Journal of the American Pharmaceutical Association*, Easton, Pa., 1975, Jan., vol. NS15, no. 1, pp. 34-37.

The purpose of this study was to design and evaluate manual drug utilization review protocols which might be used by long-stay facility utilization review committees to conduct the medical care evaluation studies required by federal regulations. A committee selected for protocol development one drug frequently prescribed in long-stay facilities from each of 10 therapeutic categories. Each protocol underwent six reviews during which both major and minor modifications were necessary before the committee approved them. Each protocol contains: (i) a statement of the study's purpose; (ii) a statement of the assumptions made in determining the data necessary to achieve the stated purpose; (iii) a list of source documents; (iv) a description of the method used for collecting and organizing the data; (v) a description of the method used to evaluate and interpret the data; and (vi) an abstract sheet, containing the suggested criteria, to be used for data collection. Parts of a sample protocol are reproduced.

877. MCKENZIE, M. W. and others. **The pharmacist's involvement in the long-term care facility.** *Journal of the American Pharmaceutical Association*, Easton, Pa., 1975, Jan., vol. NS15, no. 1, pp. 16-20.

Increasing use of long-stay care facilities has been accompanied by an increased demand for pharmaceutical services in these institutions: 90 per cent of such services in the United States are provided by community pharmacists. A vital aspect of pharmaceutical services in long-stay facilities is the monitoring of drug therapy; it is the purpose of this paper to provide a guide to monitoring processes. It covers: (i) collection of patient data: (ii) statement of therapeutic goals; (iii) assessment of drug therapy; (iv) establishment of monitoring parameters; (v) identification and confirmation of problems; and (vi) communication of findings.

LABORATORIES

878. BARON, D. N. **Training and organization for pathology in Britain: the role of chemical pathologists.** *American Journal of Clinical Pathology*, Philadelphia, 1975, Feb., vol. 63, no. 2, pp. 269-275.

In Britain 'pathology' has a very wide meaning compared to the use of the term in the United States or most of Europe, where it usually refers to what is termed histopathology in Britain. Clinical pathology refers in Britain to the chemical and biochemical aspects of pathology, both as a basic science and for patient care. The author compares the various stages of appointments in pathology which are found in both British and American hospitals and universities, and describes with the aid of a chart the various ways in which pathologists may reach the level of consultant or senior lecturer in British hospitals or universities. The training of a pathologist is described. Pathology laboratories are situated at present in National Health Service hospitals or medical schools, and number about 600. As many as 150 of these have no medical or non-medical chemical pathologist of consultant status. A proposed scheme for British

laboratory services is agreed upon by the Department of Health and Social Security, pathologists and in general terms by the medical profession, and this is illustrated in a diagram, showing the district laboratory serving general practitioners, general, long-stay and community hospitals in its area. The work of chemical pathologists, including laboratory supervision, research, teaching and special clinical duties, is also described.

RADIOISOTOPE DEPARTMENT

879. METZ, D. and others. **An evaluation procedure for a nuclear medical department.** *Radiation Data and Reports*, Washington, 1974, Sept., vol. 15, no. 9, pp. 559-566.

After conducting an initial study of eight radioisotope departments in hospitals of varying bed capacities, over a 12-month period, the authors have attempted to develop a method of evaluating such departments. It covers administrative, health physics, educational, instrumentation and space requirements. The survey findings on space, equipment, health physics and education are presented in four tables and discussed.

880. WILLIAMS, E. S. **Organisation of the specialty of nuclear medicine.** In: Recent advances in clinical nuclear medicine, no. 1, edited by W. R. Greig and F. C. Gillespie, pp. 214-221. Edinburgh, London & New York, Churchill Livingstone, 1975. £7.50.

This paper outlines and discusses the present position of the organization of nuclear medicine in Great Britain. It then recommends the establishment of centralized departments staffed and equipped to provide the specialized facilities for carrying out a wide range of clinical tracer work. The exact details of organization should depend upon local circumstances. Centralized organization does not necessarily imply geographical centralization; local factors will predominate in deciding what staff and facilities should be dispersed to sites separated from the main department.

881. HORTON, P. W. **The dispensing of radiopharmaceuticals.** In: Recent advances in clinical nuclear medicine, no. 1, edited by W. R. Greig and F. C. Gillespie, pp. 1-43. Edinburgh, London & New York, Churchill Livingstone, 1975. £7.50.

The development of short-lived radiopharmaceuticals has led to considerable changes in the radionuclear dispensary. From a simple unit for dispensing sterile radioactive doses it has become a small-scale pharmaceutical manufacturing centre with a major role in the preparation, dispensing and monitoring of much of its output. This paper discusses the general problems of preparing radiopharmaceuticals and suggests some practical solutions, with particular reference to quality control, laboratory design, and procedures and documentation. The advantages of central dispensing for a number of hospitals are stressed.

REHABILITATION

See Abstract No. 902

DEPARTMENTS FOR SPECIAL THERAPY

See also Abstract Nos. 778, 870, 903

882. RICHARDS, B. **An evaluation of home care after spinal cord injury.** *Paraplegia*, Edinburgh, 1975, Feb., vol. 12, no. 4, pp. 263-267.

During 1972 the National Spinal Injuries Centre, Stoke Mandeville Hospital, admitted 198 patients; this is a follow-up study of 125 of them who were discharged and required home care. Two points of interest emerge from the survey: (i) the data indicates successful rehabilitation and that services for home care are more than adequate in the majority of cases; and (ii) however, there is a strong suggestion that home care still leaves much to be desired. A sense of humiliation, resentment, anger and frustration was expressed by many patients. A lot of bitterness was directed against the social services departments. The problem seems to be to find the factors which may well be missing in the transitional stage between hospital and home. Some possible factors are discussed.

883. STEINBERG, F. U. **The management of patients with spinal cord injury by a hospital-based home care programme.** *Paraplegia*, Edinburgh, 1975, Feb., vol. 12, no. 4, pp. 246-250.

The Jewish Hospital of St. Louis has operated a home care programme since 1953; it provides nursing, social services, physical and occupational therapy and home health aides. Of 249 patients with spinal cord injuries admitted to the Department of Rehabilitation Medicine since 1965, 31 (12 per cent) were managed at some time by the Home Care Division. The procedures followed are outlined and the care of the 21 patients is analysed. It is not possible to measure quantitatively the benefits of home care. However, two types of spinal cord patients benefit from organized home care: (i) patients who need home care for a limited period to ease the transition from hospital to living at home; and (ii) patients who are so severely disabled that professional help at home will be needed indefinitely. Home care does not relieve patient or family of their primary responsibilities, but enables them to accept these responsibilities by providing support.

884. COHODES, A. **Better care aim of dialysis network.** *Hospitals*, Chicago, 1975, Feb. 16, vol. 49, no. 4, pp. 44-48.

Legislation of 1972 provided federal finance for the care of virtually all United States citizens with end-stage renal disease and for reimbursement of costs for kidney dialysis and transplantation. A national network of haemodialysis and transplant units is being developed; by September 1974 a total of 543 facilities (493 hospital-based and 50 others) were participating in the programme. This paper describes the development of a number of aspects of the programme including dialysis, home care, transplantation, education and data collection.

885. RABBITTE, M. and PETERS, T. **Alcoholism.** *Nursing Mirror*, London, 1975, Feb. 20, vol. 140, no. 8, pp. 58-61.

This paper describes the work of the Alcoholism and Drug Dependence Unit, established 17 years ago at St. Bernard's Hospital, Southall, Middlesex. At first

32 beds were provided in a female ward, and four beds in a male ward, but by 1962 a 24-bed male ward entirely for alcoholics was provided, together with the 32-bed female ward. Unit rules were formulated, and by electing a group leader and deputy patients showed their acceptance of responsibility towards the whole group. Drug therapy is used, but the main treatment has continued to be group therapy. Patients are encouraged to discuss their problems and present their life story to the group for discussion; a 'slip' committee punishes by loss of privileges those patients who have started to drink alcohol again. Aversion therapy is not extensively used but may sometimes be useful. The unit also provides treatment for drug addiction. Group therapy sessions prove useful for these patients. The unit also participates in nursing education by training students and sending staff to teach at week-end courses. Half-way houses are available for all former patients of the unit, and they are encouraged to return to an after-care clinic held at the unit, and to attend Alcoholics Anonymous meetings.

INTENSIVE CARE UNITS

See also Abstract Nos. 849

886. PLESSER, A. Die Intensivstation als Ausgangspunkt interdisziplinärer Zusammenarbeit. **[The intensive care unit as the starting point for interdisciplinary co-operation.]** *Österreichische Krankenhaus-Zeitung*, Wien, 1975, March, vol. 16, no. 3, pp. 161-162, 164.

The intensive care unit at Tulln Hospital, Austria, was primarily intended only for surgical patients but was later used also for medical cases requiring intensive treatment (especially poisoning and acute respiratory conditions). The chief anaesthetist was put in charge of the unit but specialists in other disciplines were called in for consultation as required. This has led to enhanced co-operation between the specialties and to patients being treated by an 'interdisciplinary team'. The regular visits to the unit of different specialists, and the discussions which result from them, have been to everyone's advantage. To avoid difficulties the orders of the different specialists are passed to the nurses via the intensive care doctor.

887. DRAZEN, E. and others. **Requirements for computerized patient monitoring systems.** *Computer*, Long Beach, Calif., 1975, Jan., vol. 8, no. 1, pp. 22-27.

One of the early applications of computers in clinical care was in intensive care units for the monitoring of critically ill patients. The present status of computerized monitoring systems is reviewed briefly. During a recent study of systems in use in the United States, some insight was gained into user requirements, system requirements and the future of automated patient monitoring systems; these are discussed in this paper.

888. WILSON, P. and AARVOLD, J. A. **The organisation and operational nursing management of cardiac arrest.** *International Journal of Nursing Studies*, Oxford, 1975, March, vol. 12, no. 1, pp. 23-32.

The first part of this paper deals with contingency planning for cardiac resuscitation, decisions to be made before the event occurs and the equipment and team needed.

Opinions vary as to the criteria to be used in assessing the suitability of a patient for resuscitation but factors to be considered may include the patient's age, the nature and extent of his principal and/or secondary disease and the quality of life he had before admission and might expect after discharge. The resuscitation team should consist of a senior physician to diagnose and direct treatment of the patient's rapidly changing condition; an anaesthetist, anaesthetic nurse or a trained intensive therapy nurse to perform endotracheal intubation and artificial (hand) ventilation of the patient if necessary; one or two nurses to perform external cardiac massage; and one nurse to administer the injection of drugs and to manage the intravenous infusions. The basic equipment is described and reference is made to special units where the environment, resources and support facilities are geared to mounting repeated resuscitation attempts of a high standard. The second part of the paper deals with the operational management of a cardiac arrest, firstly during asystole and secondly during ventricular fibrillation.

889. HUAULT, G. Eléments concernant l'organisation d'un centre de réanimation polyvalente. **[The organization of a general resuscitation centre.]** *Hôpital à Paris*, Paris, 1974, Nov./Dec., no. 24, pp. 527-540.

The author discusses the organization of a resuscitation centre on the basis of his 10-year experience in the first European resuscitation unit for newborn babies at St. Vincent de Paul Hospital. It covers: staffing, mechanical services, technical services, cleaning and disinfection, equipment, supplies and design.

SPECIAL HOSPITALS AND UNITS

OUT-PATIENT

See also Abstract Nos. 834, 875

890. BERARDUCCI, A. A., DELBANCO, T. L. and RABKIN, M. T. **The teaching hospital and primary care: closing down the clinics.** *New England Journal of Medicine*, Boston, Mass., 1975, March 20, vol. 292, no. 12, pp. 615-620.

A shortage of general practitioners in the United States has led to extensive use of hospital out-patient departments for primary care. Because of this Beth Israel Hospital, Boston, has closed its traditional general clinics and established a primary care group practice, the Beth Israel Ambulatory Care Center (BIAC). The service, which operates from 09.00 to 21.00 provides 26 examination rooms and occupies 930 sq.m. of space. There were 33,020 patient visits during the first year of operation and 41,650 in the second. The practice is staffed by teams of full-time salaried doctors, other health professionals and paraprofessionals, house staff and medical students. Many patient visits are managed by staff other than doctors, and patients with chronic illness such as diabetes, hypertension or obesity are managed by nurses supervised by doctors. BIAC is administered jointly by one full-time administrator and one full-time medical director. It is financed on a fee-for-service basis and during the year 1973 to 1974 the average cost per visit was $20.32. Broken appointments have declined by one-third.

891. ADAM, L. Ambulante Leistungen im Krankenhaus. **[Ambulatory services in the hospital.]** *Krankenhaus Umschau*, Kulmbach, 1975, March, vol. 44, no. 3, pp. 127-130.

In Western Germany the treatment of ambulant patients is normally carried out by general practitioners or specialists outside hospitals. When this is not possible such patients are treated at a hospital only when referred by a general practitioner. By agreement with the health insurance authorities certain services (e.g. X-rays, laboratory tests) may be carried out at hospitals: the regulations governing these procedures and the arrangements for paying hospitals or hospital doctors are outlined. Polyclinics attached to teaching hospitals carry out such treatment of ambulant patients as is necessary for teaching and research. There are special provisions for the treatment of residents and emergencies and for the payment of costs by health insurance authorities.

892. GIEBINK, G. A. and others. **Current status of ambulatory health care computer applications.** *Computer*, Long Beach, Calif., 1975, Jan., vol. 8, no. 1, pp. 28-32.

This paper summarizes some of the findings of a study of 29 projects and subprojects at 19 sites. Major areas of application described include: medical records; diagnosis and consultation; physiological measurement and analysis; ancillary services (laboratories, radiology, pharmacy); and administrative services and management information. Technology problems identified include magnetic disk storage reliability, physician/computer interface, communication costs and dependence on programmers. Organization and social problems are concerned with privacy, the fragmented nature of medical care delivery systems and the need for highly qualified interdisciplinary staff. Some recommendations are made on technology, economic evaluation, and communication/dissemination of information.

CASUALTY AND ACCIDENT

See also Abstract No. 890

893. FRECHETTE, G. **A new system for Montreal: emergency care and hospital centres.** *Dimensions in Health Service*, Toronto, 1975, Feb., vol. 52, no. 2, pp. 45-47.

In 1972 roughly two-thirds of the 1,100,000 patients treated in hospital casualty departments of the metropolitan Montreal region (population 2.2 million) were non-urgent cases who did not need emergency care. The proposal is that these non-urgent cases should be dealt with in general consultation departments or 'walk-in' clinics in general hospitals while the one-third requiring emergency care should go to 'departments of medical distress treatment' (DMDTs). The latter should be at hospitals suitably equipped to provide the necessary care, one of which should serve each of the sectors (population about 200,000) into which the region would be divided. To avoid overcrowding at any particular DMDT there must be co-ordination with others so that the load can be shared. Details of the scheme are given in the paper.

894. FLEXER, M. **What potential for helicopters in EMS?** *Hospitals*, Chicago, 1975, Feb. 16, vol. 49, no. 4, pp. 60-63.

This paper examines experience with helicopter-ambulances in the armed forces and in two civilian projects. The projects have proved the usefulness of the helicopter as an

emergency ambulance in rural areas, but not in urban areas. It is emphasized, however, that success in the civilian sector requires the same factors that made the helicopter valuable to the military; (i) a well-organized two-way radio communications system; (ii) thoroughly trained technicians with the necessary legal authority; (iii) properly equipped and competently staffed hospital emergency facilities; and (iv) categorization of those facilities.

DAY HOSPITALS

895. IRVINE, R. E., editor. **Symposium on day care.** *Gerontologia Clinica*, Basel, 1974, vol. 16, nos. 5/6, pp. 239-323.

This special issue contains 15 papers, all by British authors, on geriatric day care; some of the papers were given at a multidisciplinary conference on geriatric day care organized by the Hastings Group Hospital Management Committee in November 1973. The papers are on: medical requirements; the nurse's role; day care and social needs; a general practitioner's view; transport; social services; physiotherapy; occupational therapy; workshops; planning; design; day care and society; a Department of Health and Social Security view; a regional view; and the social services view.

CHILDREN

See also Abstract Nos. 806, 875

896. PYCK, K. Problematiek van kinderen in het ziekenhuis. **[Problems of children in hospital.]** *Acta Hospitalia*, Louvain, 1974, vol. 14, nos. 3/4, pp. 277-307; summaries in French and English pp. 307-308.

The author reviews earlier work on the problems related to the admission of children to hospital. He finds that a considerable number of children are admitted for reasons other than purely medical ones. In order to prevent psychological disturbance the following proposals are made: preparation of both child and parents before admission; specific measures on admission; the creation of an atmosphere suitable for children; flexibility on visiting and rooming-in; the employment of trained persons to organize activities and look after the children; and the setting up of special psycho-social teams to deal with children's problems.

897. JENKINS, S. M. **Home care scheme in Paddington.** *Nursing Mirror*, London, 1975, Feb. 27, vol. 140, no. 9, pp. 68-70.

The St. Mary's Hospital, Paddington, home care scheme for children was inaugurated in 1954 with the object of preventing the disturbance caused by the separation of mother and child. Since 1961 this home care unit has been manned (on a 0900 to 1700 basis) by a registrar, a trained children's nurse and a part-time secretary. The number of admissions to the scheme is between 200 and 300 a year. The sources of patients for the year April 1973 to March 1974 were as follows: hospital in-patients, 119; casualty or out-patients, 25; family doctor or health visitor, 33. The most frequent diagnoses of patients for the same period were upper respiratory tract infections, feeding problems, chronic diseases, blood disorders, and CNS disorders. One-third of patients were under one year of age, one-third between one and five, and one-third over five.

898. MARTIN, F. R. **The nurse's role in the home care unit.** *Nursing Mirror*, London, 1975, Feb. 27, vol. 140, no. 9, pp. 70-72.

The qualified children's nurse attached to the home care unit at St. Mary's Hospital, Paddington, works (as do the other members of the team) from 0900 to 1700 Monday to Friday. The team meets every morning from 0900 to 1000, during which time mothers can telephone for visits or advice. The rest of the day is spent in home visiting and the work includes: dressing wounds; suture removal; enemas; injections; advice on baby feeding, special diets, management of diabetics and care of the skin; weighing; and assessing home situations. It is stressed that the nursing is done by the mother, the nurse's role being that of an adviser and encourager. In this paper the nurse describes, as an example, how she looked after an eight-year-old diabetic boy in his home.

GERIATRICS AND LONG-STAY

See also Abstract Nos. 835, 871, 874, 876, 877, 913

899. BISCOP, G. de. Problematiek van de bejaarden in het ziekenhuis. **[Problems of the elderly in hospital.]** *Acta Hospitalia*, Louvain, 1974, vol. 14, nos. 3/4, pp. 309-314; summaries in French and English pp. 314-315.

In 1969 about 12.5 per cent of the population of Belgium was over 65 and during the years 1960 to 1969, while the population as a whole increased by five per cent, those over 65 increased by 15 per cent. Geriatric patients represent a problem group in hospitals. This is because symptoms of ageing, the multiple disease picture, increasing vulnerability, mental and physical handicaps, and mental deterioration cause difficulties in nursing care. Complications occur with greater frequency and the hospital stay tends to be longer; and once he has been admitted to hospital the geriatric patient may not always be welcome home again.

900. TESTER, J. L. **The general practitioners' contribution to 'long-stay' hospitals in Scotland.** *Health Bulletin*, Edinburgh, 1975, Jan., vol. 33, no. 1, pp. 11-13.

A questionnaire designed to obtain information on the role of the general practitioner and the arrangements for his work was sent to 236 general practitioners identified as working in geriatric, psychiatric and mental handicap hospitals; replies were received from 205 (86.8 per cent). The aspects covered include: method of remuneration; responsibility for admitting and discharging patients; part in medical team; duties; and comments and suggestions. Three specific points were raised: (i) considerable job satisfaction is gained; (ii) good inter-personal relations prevail in the units; and (iii) the work load does not always bear a direct relationship to the number of sessions.

901. BALTES, M. M. and LASCOMB, S. L. **Creating a healthy institutional environment for the elderly via behavior management: the nurse as a change agent.** *International Journal of Nursing Studies*, Oxford, 1975, March, vol. 12, no. 1, pp. 5-12.

This paper illustrates the way in which nurses can improve the behaviour of geriatric patients by emphasizing psychological rather than physical and medical care. The nurse is often the only social and emotional partner left to an old person. Sometimes in

spite of good physical care the patient's environment may be unhealthy in a psychological sense. A case study is presented of an 80-year-old woman in a nursing home in the United States. The method of treatment and the results are presented and it is shown that systematic use of social contact plus tangible 'reinforcers' produced improved behaviour. The second phase of treatment which had been planned could not be carried out because of illness in the patient.

NEUROLOGY AND NEUROSURGERY

See Abstract Nos. 779, 780, 857

CARDIOLOGY

See also Abstract No. 888

902. BORGMAN, M. F. **Coronary rehabilitation—a comprehensive design.** *International Journal of Nursing Studies*, Oxford, 1975, March, vol. 12, no. 1, pp. 13-21.

A rehabilitation plan for cardiac patients is described. It covers disease prevention, diagnosis, functional assessment and the initiation or co-ordination of nursing and ancillary services. The goal is to return the patient to normal living, or as near normal as possible. Although rehabilitation varies with the individual patient the basic plan is similar for all patients. It consists of four phases: (i) acute care when most attention is given to the prevention of life-threatening problems but some rehabilitation such as early ambulation and low energy activities related to self-care can be introduced; (ii) the remaining period of hospital stay during which the patient may be on an intermediate or regular clinical unit and astute nursing assessment is needed so that members of the care team know how he is adjusting—patient teaching is important at this stage; (iii) home convalescence during which the community nurse assumes an important role, giving further counselling especially with regard to exercise ability and resumption of sexual activity; and (iv) recovery and maintenance of health phase, during which the rehabilitated patient assumes the major responsibility for his maintenance but reports regularly for health examination. A vocational counsellor or industrial nurse will have determined the demands of a specific job and correlated it with the patient's functional ability. Tables in the text set out the design for rehabilitation and illustrate the energy demands of various activities.

903. MUGICA. Le département de stimulation cardiaque du Centre chirurgical Val-d'Or, à Saint-Cloud. **[Department of cardiac stimulation, Val-d'Or Surgical Centre, Saint-Cloud.]** *Techniques Hospitalières*, Paris, 1974, Dec., vol. 31, no. 351, pp. 43-47.

The Val-d'Or thoracic surgery centre has 140 beds; of these 10 are in the resuscitation service and 25 are occupied by patients who are having pacemakers inserted. It is estimated that the stimulation department implanted 800 pacemakers in 1974. The department has a modern operating theatre and an office. Details are given of staffing, admission procedures, pre- and post-operative care and follow-up care. Two photographs and reproductions of three of the forms used are included.

UROLOGY

See Abstract No. 884

MATERNITY

See Abstract Nos. 781, 782, 847, 889

GYNAECOLOGY

See Abstract No. 847

DENTISTRY

See Abstract No. 827

PSYCHIATRY

See also Abstract Nos. 783, 873, 885

904. VIEFHUES, H. Universitätskliniken und Krankenhäuser als Spannungsfeld. **{Tension between university departments and psychiatric hospitals.}** *Das öffentliche Gesundheitswesen*, Stuttgart, 1975, Feb., vol. 37, no. 2, pp. 85-89; summary in English p. 85.

The differing aims, and attitudes to patients, of university hospitals and general hospitals are discussed in relation to their development (particularly in Germany) over the centuries. The tendency has been for the university hospital to select its patients and for the more chronic physically and mentally ill patients to be excluded from university hospitals. In psychiatry this dichotomy is particularly noticeable and this leads to tension between university psychiatric units and psychiatric hospitals.

905. VOINESKOS, G., MORRISON, M. F. and JAIN, R. C. **The introduction of a crisis unit in a mental hospital.** *Canadian Psychiatric Association Journal*, Ottawa, 1974, Oct., vol. 19, no. 5, pp. 445-452.

This paper describes a crisis unit which was developed in a psychiatric hospital as an integral part of a comprehensive catchment area-based clinical service. The unit is a 14-bed ward on the first floor of a 150-bed, five-storey building; in addition to carpeted, warmly furnished patient rooms, the facilities include day, examination and treatment, medicines and chart rooms and offices. The unit provides crisis assessment and intervention for all patients referred to the service and a 72-hour maximum stay in-patient and day care crisis treatment programme. Comparative data on two patient cohorts are given. It is suggested that treatment-oriented crisis units should be considered an essential and integral component of psychiatric services in both psychiatric and general hospitals.

906. HUBER, G. Probleme der Doppelrolle Universitätsklinik und Landeskrankenhaus. **[Problems of the dual role of university department and psychiatric hospital.]** *Das öffentliche Gesundheitswesen*, Stuttgart, 1975, Feb., vol. 37, no. 2, pp. 76-84; summary in English pp. 76-77.

In 1968 the Weissenau Psychiatric Hospital took on the additional work of a teaching hospital: medical students spend a period in residence there and research is also carried out. All doctors play an active part in teaching. This new concept and its concomitant restructuring of services has improved patient care and has assisted in the development of a treatment centre for social psychiatry. The close contact with students encourages doctors to work in psychiatric hospitals. This period of training, which is both practice-oriented and patient-oriented, is an improvement on conventional methods. It enables the student to acquire basic experience in psychiatry while studying the immediate interaction between patient and doctor.

907. LAUTER, H. Die Aufgabenteilung zwischen Universitätspsychiatrie und Anstaltspsychiatrie. **[Co-ordination of the work of university psychiatry departments and psychiatric hospitals.]** *Das öffentliche Gesundheitswesen*, Stuttgart, 1975, Feb., vol. 37, no. 2, pp. 89-95; summary in English pp. 89-90.

If co-operation between university psychiatric departments and psychiatric hospitals in Western Germany is to be improved, there must be a redistribution of training and research activities. Because of their criteria for the admission of patients, research at training hospitals is far removed from the reality of normal hospital experience. It is however thought that it would be a mistake for university departments of psychiatry to accept all patients from a specified catchment area since this would inhibit specialized research. But it would be helpful if the university department would participate in regional psychiatric care and make this a subject of research.

908. NICKLESS, G. **Therapeutic teams and their patients: a major relocation exercise.** *Nursing Mirror*, London, 1975, March 20, vol. 140, no. 12, pp. 78-80.

At Herrison Hospital, Dorchester, a separate medical team is responsible for the care of patients admitted from each of three regions: East Dorset, West Dorset and Bournemouth. It was decided to reorganize the admission and ward areas to provide accommodation for each team's patients. This paper describes how the move was planned and carried out and some of the problems involved. Five sub-groups were set up with responsibilities for: staffing; movements of patients; portering and supportive services; records; and works and buildings.

909. JOHNSEN, G. Familiebehandlingen ved Modum Bads Nervesanatorium. **[Family care at Modum Sanatorium for Nervous Diseases.]** *Sykehuset*, Oslo, 1975, vol. 38, no. 3, pp. 133-139.

Modum Sanatorium for Nervous Diseases developed the idea of accommodating the whole family as a routine therapeutic measure between 1963 and 1967. Since 1968 the Norwegian health insurance scheme has subsidized patients' hospitalization in the family treatment wards at Modum. The basic philosophy is that if a married person requires treatment, the spouse also needs admitting in order to foster open communication between the two. Since 1970 the State has also paid for children's board, lodging

and education at the sanatorium in cases where the committing authority deemed it necessary to treat the entire family. A children's (school) house has been built from funds raised by voluntary contributions. The complex of family villas, family wards and boarding school now comprises 106 beds and is staffed by 12 doctors, two psychologists, three social advice officers (almoners), 25 nurses, eight occupational therapists and approximately as many staff as patients.

910. JONES, M. **Community care for chronic mental patients: the need for a reassessment.** *Hospital & Community Psychiatry*, Washington, 1975, Feb., vol. 26, no. 2, pp. 94-98.

The United States federal community mental health programme was introduced rather abruptly in 1963 with little or no attempt to prepare the general public for it. It was assumed that the community would be able to help to look after thousands of patients who up to that time had been in psychiatric hospitals. State hospitals vied with each other to lower their bed occupancy but the change was prompted more by political and economic considerations than by any planned treatment strategy. In many cases patients have gone to live in boarding and nursing homes where the staff have had little experience of chronic mental patients and there is no planned activity for them. The author feels that a new philosophy of care for the mentally ill is needed. He describes the system at Dingleton Hospital in Scotland where he was in charge for seven years. Here an open social organization was developed in a traditional hospital. This attempted to meet patients' needs and it led to improved staff morale and a gradual reduction in the patient population. This model of an open system illustrates several points: (i) the attitude towards state (psychiatric) hospitals needs to be re-evaluated; (ii) the social organization in which patients live needs examining, whether it be in psychiatric hospital, nursing home or boarding home; (iii) better links are needed between hospital and community services; (iv) the development of alternatives to hospital care should not be left to chance; and (v) legislators at all levels must change their attitudes to chronic illness and dependency.

911. RANEK, J. and SMITH, C. G. **Social factors in posthospital adjustment: a test of alternative models.** *Human Relations*, London, 1975, Feb., vol. 28, no. 1, pp. 23-47.

The research described in this paper was aimed at demonstrating the comparative explanatory and predictive powers of variant models in relation to the post-hospital adjustment of psychiatric patients. Five models gleaned from the literature are reviewed and listed. They are the medical, moralistic, anomie, labelling and interactionist models. Adjustment, the dependent variable in the study, is defined in terms of performance level in three critical areas of the ex-patient's life in the community—task-oriented adjustment, inter-personal adjustment and psychiatric symptomatology. Independent variables—measures of ideology, opportunity structures and behavioural expectations—were selected on the basis of empirical research and theoretical treatment of patients' post-hospital adjustment. Findings suggest that a dynamic interactionist framework is the most efficient model for predicting adjustment. The variables which predict best are ideology and behavioural expectations. Six tables are set out and there is a list of 31 references to the literature.

912. OZARIN, L. D. and WITKIN, M. J. **Halfway houses for the mentally ill and alcoholics: a 1973 survey.** *Hospital & Community Psychiatry*, Washington, 1975, Feb., vol. 26, no. 2, pp. 101-103.

A survey was made of halfway houses for the mentally ill and for alcoholics in the United States. Halfway houses were defined as residential facilities that operate seven days a week, provide room, board and assistance in the activities of daily living; they have a staff member living in the house or 24-hour staff supervision. All of the 209 halfway houses for the mentally ill and 99 per cent of the 597 for alcoholics provided information on: number of beds, residents and staff at October 1973; age and sex of the group served; any restrictions on admission; and types of service provided. The 209 psychiatric houses had 7,089 beds and an occupancy rate of 85 per cent. The largest number, 43 per cent, had fewer than 15 beds; 14 per cent had 50 or more beds. Sixty-seven per cent admitted patients of both sexes; over half were non-profit. Nearly half (42 per cent) of residents were aged between 25 and 44 and only six per cent were over 65. Nine per cent of patients stayed less than one month, 25 per cent stayed two years or more. Almost half the residents used public welfare funds as their primary means of support. The houses for alcoholics had 13,296 beds and an occupancy rate of 77 per cent. Thirty-eight per cent of the houses had fewer than 15 beds and only six per cent had more than 50. They serve a more predominantly male population and their residents tend to be older than those in the psychiatric houses. In each type the majority of residents return to independent living either on their own or with relatives or friends.

913. FOTTRELL, E. **Aspects of the functioning of a psychogeriatric unit.** *Modern Geriatrics*, London, 1975, March, vol. 5, no. 3, pp. 4, 6, 10, 12, 14.

The author describes the functioning of a psycho-geriatric unit in a large psychiatric hospital with emphasis on those aspects of it which may be useful to others planning or managing such units and to general practitioners who need to make use of them. The unit was planned to provide a service to a population of 250,000 with about 37,000 of these over the age of 65. It consisted of four wards each with a maximum bed capacity of 40; one of these was an assessment ward. The staffing of the unit and the admissions policy and discharge procedure are described. A psycho-geriatric unit is greatly dependent on proper community supportive facilities such as old people's homes, day hospitals, etc., and lack of community support was a great drawback to the functioning of this unit. Suggestions are made as to how the general practitioner can identify old people at risk of mental breakdown and the help he can obtain from the social services department. The psycho-geriatrician is greatly involved with the social and psychological problems of his patients but he needs the help of the geriatrician if he is to provide a comprehensive medical service for them.

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